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OBSTETRICAL TRANSACTIONS.

VOL. I.

TRANSACTIONS

OF THE

OBSTETRICAL SOCIETY

OF

LONDON.

VOL. I.

FOR THE YEAR 1859.

TOGETHER WITH A REPORT OF THE INAUGURAL MEETING OF THE SOCIETY, A LIST OF OFFICERS, FELLOWS, ETC.

LONDON:
LONGMAN, GREEN, LONGMAN, AND ROBERTS.
1860.

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J. E. ADLARD, BARTHOLOMEW CLOSE, E.C.

REPORT OF THE INAUGURAL MEETING

OF THE

OBSTETRICAL SOCIETY OF LONDON,

HELD AT THE

FREEMASONS' TAVERN, ON DECEMBER 16TH, 1858.

THE inaugural Meeting of the Society took place on Dec. 16th, 1858, at the Freemasons' Tavern. A large number of metropolitan obstetric teachers and practitioners were present.

DR. RIGBY was called to the chair. In a short but lucid discourse, he briefly explained the object for which the meeting had been called together. They were there assembled for the purpose of inaugurating a Society to be devoted to the advancement of the knowledge of Obstetrics and the Diseases of Women and Children. It had long been a matter of exceeding surprise to him that no Society had been instituted in the metropolis for this purpose. There could be no question as to the fact that a very large amount of valuable experience was wasted and lost, owing to the circumstance that no machinery for the systematic collection of facts relating to midwifery could be said to be in operation. The new Society would be eminently useful to general practitioners, most of whom have daily brought before their notice facts which the Society might be the means of registering. The Society could be made a depository for general heads of important cases in midwifery throughout the kingdom, and it would, he trusted, be largely supported by country as well as town practitioners.

The foundation of the Society would, he was convinced, be attended with advantages of extreme importance to science and to the community at large. Before calling on Dr. Tyler Smith to propose the first resolution, he could not abstain from remarking that the energy and perseverance which that gentleman had exhibited in promoting successfully the foundation of the Society entitled him to the deepest thanks of all interested in the undertaking.

Dr. Tyler Smith moved the first resolution,—"That it is expedient to institute a Society for the promotion of knowledge in all that relates to Obstetrics and the Diseases of Women and Children, in which practitioners resident in the metropolis and in the provinces shall be invited to take an active part; and that such a Society be now founded, under the name of the Obstetrical Society of London." He detailed the steps he had taken for the formation of the Society, and which had resulted in the present meeting. There was no other city or community in the world in which equal scope for such an Association existed. London contained thirteen obstetric schools, all well appointed and in full activity. There were between thirty and forty practitioners, who either were, or had been, obstetric teachers, besides many others engaged in special obstetric practice. Nearly two thousand gentlemen were engaged in general practice in the metropolitan districts, upon whom the responsibilities of midwifery fell even more heavily than those of medicine or surgery. No class of cases more urgent than placenta prævia and post-partum floodings, or those in which craniotomy or turning might be thought necessary, occurred in medicine or surgery. In medical or surgical cases assistance could generally be obtained; but in obstetric cases, dangerous emergencies were often so sudden as to throw the whole responsibility upon the individual practitioner. The number of labours occurring in the metropolis annually, amounted to about eighty thousand. In this great field, and with so many workers, a rich harvest of knowledge might be brought in through the agency of an Obstetrical Society. But they

were not limited to London alone. Already, the principal teachers in the provinces had joined themselves to the undertaking. We might get something like a fair idea of the importance of obstetric practice in this country, from the fact that, of all the women delivered in England and Wales, no less than one, in every one hundred and eighty-nine, died in childbirth. The number of still-born children was over twenty-two thousand a year. The chief business of an Obstetrical Society would be to diminish this mortality, and the task was one of the highest importance. It seemed to him a positive duty, from which obstetricians could not escape, that they should unite together to promote the scientific and social interests of the branch of practice in which they were engaged. In the course of the proceedings which it had been necessary to take, he had met with various objections to the institution of an Obstetrical Society, which he would notice and endeavour to refute. It was said, why have a special society for obstetrics, when no special surgical or medical societies were considered necessary? The answer to this was, that the Colleges of Physicians and Surgeons were, in reality, great institutions for the special advancement of medicine and surgery. Those engaged in obstetric practice had no public body to which their allegiance was due, and upon which they could depend for the promotion of their department of the art of healing. This had always acted as a discouragement, but it would, to a great extent, be removed by the operations of a successful Obstetrical Society. Some objectors were loud in their warnings against the evils of anything like a separation from the Colleges of Physic and Surgery. No wish existed for any such separation; but it was felt by many, that we had too long leant upon others; that we were now able to walk alone; and that we should be all the more respected in the colleges to which we belonged, if we could show ourselves possessed of something like an independent power of action. Some who opposed our proceedings argued that the Society would only increase talk and talkers, and that reticence was more to be desired than publicity.

He wished to speak with every respect of those who differed from him, but he thought this dictum was somewhat out of joint with the age in which we lived. Silence was not progress. As iron sharpeneth iron, so in the collision of mind with mind, true doctrines were brought out and sustained. Discussion had well been said to be the very life and soul of science. There were others who acknowledged that science and practice would be advanced by the proposed Society, but were fearful that obstetrists would suffer in a social point of view, from placing themselves in any degree apart from the physicians and surgeons engaged in what was called pure practice. This he did not believe. At all events, it was their plain duty, first and foremost, without thinking of consequences, to advance the science and art in which they were engaged. They certainly need not dread the result of such a course of proceeding. It was an idle fear to imagine that they could lower themselves in the social scale by raising themselves in knowledge. Union ought not to excite jealousy. These were not the times in which improvements were made by individual efforts alone, but in which numbers of men engaged in the same pursuit, by uniting together, have produced some of the greatest results of modern civilization. On every ground, therefore, having reference to their scientific and social position, he felt the greatest satisfaction in moving the resolution to found the Obstetrical Society of London.

Dr. Granville, F.R.S., who seconded the resolution, stated that he attended with pleasure this second attempt to establish an Obstetrical Society in London. He was grieved to notice that he could claim the privilege of being the oldest veteran in the room; a whole generation of obstetrical practitioners had passed away, who knew of his earnestness in promoting their art and science. He hoped that this endeavour to establish such a Society would prove more permanently successful than the first. The book which he held in his hand would show that in November, 1825, a meeting was held at his house, attended by the *élite* of the obstetrical practitioners of that time. A Society

was then formed, over which Sir Charles M. Clarke presided. The plan originally laid down by himself was considered too vast, and, as it embraced two distinct parts, the majority of the members enrolled resolved to adopt one only—viz., the political or state part of the question. Dr. Granville next alluded to the condition of the practice of midwifery in this country at a former period. At his return from Paris in 1817, this condition was a most anomalous one. Not only might any one practise midwifery without let or hindrance, and indeed without any medical qualification whatever (there being no repressive laws to prevent it), but this very licence was made the means of enabling quacks to do their work with impunity, defying judge and jury when summoned before a court of law, by setting up as a defence, that they did not pretend to be doctors, surgeons, or apothecaries, but only man-midwives. The degraded state of the profession of the art was such, that the College of Physicians considered a licentiate practising midwifery as unworthy of a fellowship; while a member of the College of Surgeons was deemed ineligible to be on the list of Council or Court of Examiners if he practised as an accoucheur; and the Apothecaries' Company, which had been pressed to institute an examination in midwifery, long resisted the "soft persuasion." This being the case, the Society brought together in 1825 applied themselves to the removal of all such indignities, and to raise to a proper and dignified station the practitioner in midwifery. By memorials and letters to the corporate bodies, and through the then Secretary of State for the Home Department, this was accomplished. He had the task of replying to the many cavils and the bold sophistry of the late Sir H. Halford, who fought hard to perpetuate their exclusion from the College. Sir H. Halford's contemptuous (to his name infamatory) expression, made use of in a letter to Sir R. Peel, that "midwifery was an unfit occupation for gentlemen of an academical education," was well known. After exertions continued during three years, that Society succeeded in obtaining the following points:—1. A recognition

of the honourable position of obstetricians amongst the medical practitioners of the three corporate bodies. 2. An examination in midwifery by the Apothecaries' Company. 3. The admission of persons practising midwifery (being members of the College of Surgeons) to be eligible for a post in the Council. 4. The concession by the College of Physicians, that licentiates practising midwifery shall not be ineligible for the fellowship of the College. At present, these reforms have gone further: the corporate bodies examine in midwifery; one of them delivers diplomas in obstetrics; accoucheurs are made Fellows of the College of Physicians; and accoucheurs are on the Court of Examiners of the College of Surgeons. Thus the first attempt of an English Obstetrical Society has not been altogether barren of results. All state, or political difficulties have been removed; there is only left for the Society we now propose to establish the much more congenial task of promoting the purely scientific part of the great questions which such an extensive field as the practice of midwifery, the treatment of children, and the study and management of female diseases offers to the attention of the highly-educated physician, surgeon, or general practitioner of our days. Though having long ceased, after nearly thirty years of actual midwifery, to attend labours, he was happy to have an opportunity of joining his feeble efforts in promoting the welfare of the proposed Society.

Dr. Barnes, in moving the second resolution,—"That all legally-qualified medical practitioners shall be eligible for election as ordinary Fellows of the Society,"—hailed with satisfaction the establishment of a Society in the metropolis for the cultivation of obstetrics. He considered it a reproach to us that, in consequence of the absence of a Society devoted to the promotion of this department of medicine, we were not in the same position as the obstetricians of towns on the Continent of considerably less magnitude than London, from which authorities on particular questions emanated and derived that weight which a Society is always capable of imparting. It must long

have appeared singular that Obstetric Societies should exist in Dublin, Edinburgh, and Berlin, where obstetric experience must be very small, compared with that of London, whilst there was no such Society in London. We had long been accustomed to receive instruction from the Societies of those places. It was, he believed, time to vindicate the honour of the great London school of midwifery. It was beyond a doubt that obstetric practice was nowhere so successful to mother and child as in England. Had we, then, not something to teach? Was it not our duty to show in what lay the causes of our greatest success? He felt confident as to the Society's future.

Dr. Metcalfe Babington, who seconded the resolution, dwelt on the many and great opportunities in the metropolis for obtaining and collecting statistics and other valuable information on that very important branch of our profession —the obstetrical art. He was much surprised that the former Society—the history of which had been detailed to them by Dr. Granville—had not thought fit to continue its efforts. He agreed most entirely with Dr. Tyler Smith, and thought that any objections likely to arise to the formation of such a Society had been most completely answered by him. Not many years ago, certainly, the obstetric practitioners occupied a position by no means flattering. We were considered unworthy to take a place in a scientific brotherhood. Not long ago an eminent physician said derisively of the obstetrician, that his *métier* was to undertake everything, and that the witty saying of a late divine, in regard to Lord John Russell, applied equally to him—"that he would deliver a woman with child, cut a man for the stone, or take command of the Channel fleet." Now, he believed that the obstetrician would, indeed, in the practice of his art, undertake and accomplish anything that required boldness, energy, talent, and presence of mind. He had great pleasure in seconding the resolution.

Prof. Fergusson, F.R.S., in proposing the third resolution, stated that he had been requested to do so since

entering the room. It was his duty to read the names of the gentlemen who had been selected as office-bearers in the new Society for the ensuing year; but before doing so, he would, in accordance with the example already set by the gentlemen who had just spoken, take the liberty of making a brief address on such an interesting occasion. It might seem curious that one in that department of the profession to which he had chiefly devoted his attention should come to such a meeting. At one time in his own history he should have had such a feeling, but years, which bring experience, had led him to think differently on such matters than he did formerly, and he was now convinced there were no men more useful in their walk in life than such as practised that department in which the generality of those present were so much interested. Their respected chairman, the veteran Dr. Granville, Dr. Tyler Smith, and others, had stated the objects of that evening's gathering, and it was not for him, in such company, to attempt further enlightenment. He could not, however, let the opportunity pass without congratulating the gentlemen present on the objects of the meeting. He thought the proposed Society highly desirable, particularly in London. If it were desirable to have specialities, there was no place like London for such professional divisions; and if such Societies as that contemplated flourished in smaller communities, it was certainly needful that this metropolis should be thus represented. There were already Societies for physicians and surgeons, but he thought the department of medicine to which most of the gentlemen present were devoted, deserved a higher representation than that hitherto accorded to it. In the progress of time, obstetric medicine had acquired a high position, and in his opinion this was a strong mark of the progress of civilization. Should the talented author of the work devoted to that subject require a new theme for his pen, he would humbly suggest this one as worthy of his attention. As civilization advanced, the attentions of the masculine sex to the female became more marked. In savage life, the female was left almost to her own resources.

He would not enter upon the question of morality in civilized or savage life on such occasions, but he would not hesitate to affirm that attention to the female in her hour of trouble and peril was a strong characteristic of civilization. No department in medicine had made such rapid strides in modern times as that in which they were interested; and it was gratifying to perceive how, in the progress of time, the position of the obstetrical practitioner had at last been recognised by the Colleges of Physicians and of Surgeons in London. The youngest man in that room might perhaps know of the frightful results attendant upon the practice of the midwives of former times; and all the gentlemen present, with the numerous body of their contemporaries in the same department, might congratulate themselves that the step now about to be taken would go far to shake off all such dangers in time to come. In offering his hearty congratulations on the proposals of the night, and in reading over the names of the proposed office-bearers, Mr. Fergusson stated that, amongst the gentlemen named, he had a personal knowledge of many; and on that account, as also from the high professional repute of those whom he did not know individually, he could not hesitate to say that in his opinion the office-bearers would prove highly efficient members of the Society.[1]

Dr. Routh, in seconding the resolution, gave his cordial support to the Society. To none did woman, in the time of trial allotted by the Creator, owe more than to the accoucheur. Every man might not have a wife, but most had sisters; surely, then, that midwifery should be well understood and practised was greatly to be desired. He felt that many in the room had obligations to other accoucheurs which nothing could repay. He hoped that in the new Society the political element would not be entirely lost sight of. How many lives of young and interesting children were daily sacrificed by prescribing chemists and druggists. By pointing out the difficulties in the treatment of children's

[1] For List of Officers referred to, see page xv.

diseases, this source of evil might be removed. With regard to midwives, again, he considered that, as on the Continent, it should be made obligatory on them to go through a regular course of study, and that the State was guilty in allowing them to practise midwifery without such education. There was, therefore, still much room for political intervention. If the Society not only sought to advance the science of the art, but also endeavoured to extend the knowledge thereof amongst those who practised it, a great service would indeed be performed, and immense good would be derived by all classes.

The next resolution, empowering the Council to frame laws, and to draw up and circulate a prospectus setting forth the objects of the Society, was proposed by Mr. Spencer Wells, and seconded by Dr. Mackenzie.

On the proposition of Dr. Tanner, seconded by Dr. Graily Hewitt, a vote of thanks to Dr. Rigby, for his kindness in presiding and for his able conduct in the chair, was carried by acclamation, and the proceedings terminated.

OBSTETRICAL SOCIETY OF LONDON.

OFFICERS FOR 1859.

ELECTED AT THE INAUGURAL MEETING, DEC. 16TH, 1858.

HONORARY PRESIDENT.	SIR CHARLES LOCOCK, Bart., M.D.
PRESIDENT.	EDWARD RIGBY, M.D.
VICE-PRESIDENTS.	ROBERT BARNES, M.D. S. BERRY, F.R.C.S.E., Birmingham. LAWSON CAPE, M.D. A. B. GRANVILLE, M.D., F.R.S. C. J. W. LEVER, M.D. (deceased). EDWARD W. MURPHY, M.D. HENRY OLDHAM, M.D. T. RADFORD, M.D., Manchester. W. TYLER SMITH, M.D. CHAS. WALLER, M.D.
TREASURER.	W. TYLER SMITH, M.D., 7, Upper Grosvenor Street, W.
HONORARY SECRETARIES.	GRAILY HEWITT, M.D., 17, Radnor Place, Hyde Park, W. T. H. TANNER, M.D., 10, Charlotte Street, Bedford Square, W.C.
OTHER MEMBERS OF COUNCIL.	JAMES ALLEN, Esq., York. EDWARD BATTY, Esq., Liverpool. F. ELKINGTON, M.D., Birmingham. C. METCALFE STUART BABINGTON, F.R.C.P. I. BAKER BROWN, F.R.C.S.E. FREDERICK BIRD, M.D. WALTER BRYANT, F.R.C.S.E. WILLIAM BUTLER, Esq., Woolwich. JOS. CHOLMONDELEY, Esq. J. HALL DAVIS, M.D. ROBERT DRUITT, M.D. SAMUEL GRIFFITH, M.D. (deceased). GEORGE D. GIBB, M.D. S. W. J. MERRIMAN, M.D. F. W. MACKENZIE, M.D. J. T. MUSGRAVE, Esq. W. O. PRIESTLEY, M.D. C. H. F. ROUTH, M.D. SPENCER WELLS, F.R.C.S.E. R. UVEDALE WEST, M.D., Alford, Lincoln. J. WHITEHEAD, M.D., Manchester.

BYE-LAWS AND REGULATIONS,

As Revised at the Annual Meeting, held January 4th, 1860.

CHAPTER I.

OF THE OBJECT AND CONSTITUTION OF THE SOCIETY.

I. The OBSTETRICAL SOCIETY OF LONDON is instituted for the promotion of knowledge in all that relates to OBSTETRICS, and the DISEASES OF WOMEN AND CHILDREN.

II. The Society shall consist of Fellows and Honorary Fellows. The Honorary Fellows shall not exceed in number Twelve British Subjects and Twenty Foreigners.

III. All Medical Practitioners registered, or, if practising abroad, possessing a British qualification, shall be eligible for election as Fellows of the Society.

IV. The Officers of the Society shall be elected from the Fellows, and shall consist of an Honorary President, a President, six Vice-Presidents, a Treasurer, and two Honorary Secretaries, who, with eighteen other Fellows, shall constitute the Council, and shall have the management of the Society's affairs. Two of the Vice-Presidents and six other Members of the Council shall be non-resident Fellows of the Society.

CHAPTER II.

OF THE ELECTION AND ADMISSION OF FELLOWS.

I. Candidates shall be proposed on the recommendations of three Fellows, two of which shall be from personal knowledge.

II. Candidates shall be balloted for at the meeting following that on which the certificate has been read and suspended. No gentleman shall be declared elected unless two thirds of the votes be in his favour, fifteen Fellows at least being present.

III. Newly-elected Fellows, if residing within four miles of Charing Cross, must be admitted by the President, or Fellow officiating in his stead.

Form of Admission;

After paying his subscription for the current year, and signing the Obligation Book, each newly elected Fellow shall be presented by some Fellow of the Society to the officiating President, who shall address him as follows:—"In the name and by the authority of the Obstetrical Society of London, I admit you a Fellow thereof."

IV. Newly-elected Fellows resident beyond four miles from Charing Cross, shall be declared admitted by the President, after forwarding to the Honorary Secretaries the amount of their subscription for the current year, and the obligation duly signed.

V. The form of obligation to be signed by all Fellows of the Society shall be as follows:—

"I hereby promise that I will, to the utmost of my power, promote the honour and interest of the OBSTETRICAL SOCIETY OF LONDON, and comply with the bye-laws and regulations thereof, as long as I continue a Fellow of the Society."

(Signed)

VI. If any person shall fail to comply with the regulations for the admission of Fellows within three months from the time of his election, the election shall be void.

CHAPTER III.

OF THE ELECTION OF HONORARY FELLOWS.

I. The Council shall have the power of recommending persons for election as Honorary Fellows of the Society. The election shall be conducted in the same manner as that of ordinary Fellows. They shall enjoy all the privileges of other Fellows, but shall not be required to pay any Fee.

CHAPTER IV.

OF THE WITHDRAWING AND REMOVAL OF FELLOWS.

I. A Fellow may withdraw from the Society on paying any contributions that may be due from him, and signifying his intention in writing to the President.

II. Whenever there shall, in the opinion of the Council, appear cause for the removal of a Fellow, the same shall be notified by the President to the Society at the next ordinary Meeting, and a notice forthwith sent to every Fellow of the Society, making the next Meeting special, for the purpose of considering such removal. If, on a ballot taking place, two thirds of the Fellows present shall vote for the removal, the President shall declare the Fellow in question removed accordingly. At such ballot, fifteen Fellows, at the least, must be present.

CHAPTER V.

OF THE CONTRIBUTIONS OF FELLOWS.

I. Every person elected a Fellow of the Society, shall pay in advance the sum of One Guinea annually. This subscription shall become due on the first of January in each year.

II. Any Fellow whose Subscription shall be more than three months in arrear shall be reminded of the same by the Secretaries in writing; and in the event of payment not being made, or a satisfactory answer received by the

following Meeting, his name shall be suspended in the Meeting-room, and he shall not enjoy the privileges of a Fellow until the arrears be paid. If not paid within twelve months, he shall cease to be a Fellow of the Society.

III. Fellows wishing to compound for their Annual Subscriptions may pay a Composition Fee of Ten Guineas.

CHAPTER VI.

OF THE ELECTION OF OFFICERS AND COUNCIL.

I. Every Fellow of the Society shall be summoned by letter to the Annual Meeting in January, a week's notice being given and the hour being stated.

II. The President, Vice-Presidents, Treasurer, Council, and Secretaries, shall be elected by Ballot annually.

III. The President shall be eligible for election for two years. One third of the Vice-Presidents shall go out of office annually, and shall not be eligible for re-election to the same office for three years. One third of the Members of Council shall be annually replaced by an equal number of Fellows chosen from the Society at large. In the selection of Members of Council to remain in office, a preference shall be given to those who have attended the largest number of meetings of the Council.

IV. Balloting lists recommended by the Council shall be prepared by the Secretaries, and transmitted to each Fellow by post, with the notice of the Annual Meeting.

V. Every Fellow of the Society resident beyond four miles from Charing Cross shall be entitled to vote by signing and returning the Balloting List, under cover to the President, before the Annual Meeting.

VI. The Balloting Lists shall be received by the President, folded up, during the first hour of the Annual Meeting, and the name of every Fellow voting shall be noted by one of the Secretaries. At the end of one hour the Balloting Papers shall be delivered by the President to two Scrutators, who shall report the result to the Meeting.

VII. In the event of equality of votes, the President shall determine by lot.

VIII. The Council shall have the power of filling up any Vacancies which may occur in any of the Offices of the Society until the Annual Meeting.

CHAPTER VII.

OF THE PRESIDENT AND VICE-PRESIDENTS.

I. The President shall regulate all the Proceedings of the Society and Council; he shall state and put questions, admit Fellows, interpret the application of the Bye-laws, and decide every doubtful question. He shall check irregularities and enforce the observance of the Laws. He shall sign the minutes of the General Meetings and of the meetings of Council, and return the thanks of the Society to contributors of communications, &c.

II. In the absence of the President, one of the Vice-Presidents, the Treasurer, or some Fellow chosen by the Council, shall perform his duties.

CHAPTER VIII.

OF THE SECRETARIES.

I. The Secretaries shall have the management of the correspondence of the Society and Council.

II. They shall attend all Meetings, take minutes of the proceedings, and read the same at the following Meeting. They shall read all letters and papers communicated to the Society in the order in which they have been received, unless otherwise directed by the President. They shall notify the election and admission of Candidates as Fellows of the Society.

III. They shall keep a Register in which shall be entered, in the order in which they are received, the title of every paper, letter, or communication, to be presented to the Society, with the name of the author, and the date of its reception.

CHAPTER IX.

OF THE TREASURER.

I. The Treasurer shall receive all Money due, and pay all debts, keeping particular account of all such receipts and payments.

II. No sum of Money shall be paid on account of the Society, without the previous sanction of the Council.

III. All sums of Money remaining in the hands of the Treasurer which shall not be immediately required for the use of the Society, shall be laid out in such Securities as shall be directed by the Council.

IV. The Treasurer shall keep a printed Cheque Receipt-Book for Annual Contributions. Each Receipt shall be filled up with the name of the payer, the date and the time paid for, and shall be signed by him. These Receipts shall be undersigned by the person receiving the money on the Treasurer's behalf, who shall, when he gives the Receipt, enter and sign a copy of the particulars on the fly-leaf of the Cheque-Book.

V. The President, one Secretary, and two Fellows of the Society nominated by the President at some Meeting of the Society previous to the Annual Meeting, shall audit the Accounts of the Treasurer.

VI. They shall make a written Report to the Society at the General Meeting, and shall answer any questions regarding the general state of the Funds of the Society.

CHAPTER X.

OF THE COUNCIL.

I. The Council shall have the management of the affairs of the Society.

II. They shall meet on the first Wednesday of the Months of February, April, June, July, October, and December, or oftener should they see reason, at Seven o'clock in the Evening precisely. Five shall form a quorum.

III. The President, or any three Members, may call an extraordinary Meeting, of which Meeting notice shall be transmitted by the Secretaries to each Member three days previous to the Meeting.

IV. The Council shall determine questions by Vote, or if demanded, by Ballot, the President having a casting Vote.

V. They shall from time to time make such regulations and issue such orders as shall appear to them conducive to the good government of the Society, and to the proper management of its affairs.

CHAPTER XI.

OF THE TRANSACTIONS OF THE SOCIETY.

I. The Transactions of the Society, under the designation of "Transactions of the Obstetrical Society of London," shall be printed at such times and in such manner as the Council shall direct.

II. The Transactions shall be presented to all Fellows of the Society.

III. No Fellow of the Society whose Subscription is in arrear shall receive the Transactions.

IV. A Committee of twelve Referees shall be appointed by the Council annually, to examine any papers which the President may think ought to be referred to the Committee, prior to their being read before the Society. The Referees so appointed shall also examine all papers read before the Society, and report thereon to the Council before their publication in the Transactions. If a paper be refused for reading or publication by one Referee, it shall then be submitted to a second, and in case of disagreement, to a third Referee, whose decision shall be final. Any writer of a paper shall have a right to object to one or more names on the list of Referees, to whom he may not be willing to have his paper submitted.

CHAPTER XII.

OF THE ORDINARY MEETINGS.

I. The Ordinary Meetings of the Society shall be held on the First Wednesday in each Month, the Months of August and September excepted, at Eight o'clock p.m. precisely.

II. Each Fellow may introduce two Visitors, on writing the Visitor's name in a Book kept for the purpose. The same Visitor shall not be admitted more than twice during the Season.

III. The business of the Ordinary Meetings shall be the reading of Short Papers and Cases, Oral Communications, and the exhibition of Pathological Specimens, during the first half hour of the Meeting; after which, Papers of greater length contributed by Fellows of the Society and others, shall be read and discussed.

IV. At the Ordinary Meetings of the Society, nothing relating to its Laws or Management shall be brought forward.

V. At Ordinary Meetings ten shall form a quorum; but fifteen shall be necessary for the election of Fellows.

VI. Additional Ordinary Meetings shall be held if the Council think fit.

CHAPTER XIII.

OF THE ANNUAL AND SPECIAL MEETINGS.

I. The annual Meetings of the Society for the election of Officers and other members of the Council shall be held on the night of the Meeting of the Society in January.

II. The President and Council shall at any time, on giving a week's notice, convene a Special Meeting of the Society for the consideration of particular business.

III. New Laws shall be proposed only by the Council at the Annual Meeting of the Society in January, notice of the proposal being sent to the Fellows with the summons

to the Meeting. For the adoption of the Law proposed, the Votes of two thirds of the Fellows present shall be required in its favour.

IV. Any three Fellows who are not of the Council may recommend new Bye-laws, or the repeal or alteration of old ones to the Council, by writing under their hands transmitted to one of the Secretaries. On the recommendations thus made, the Council shall come to a decision at their first Meeting; and if such decision shall not be satisfactory to the three said Fellows, the Council, if required by them, shall, at the Annual General Meeting, or some Special General Meeting, which they shall summon for the purpose, bring the same forward, with their decision thereupon, for the opinion of the Society at large. The decision of the Society then pronounced shall be final.

CHAPTER XIV.

OF THE SOCIETY'S PROPERTY.

I. The whole of the Society's property and effects, of what kind soever, shall be under the direction and management of the Council, subject to the control of the Annual or Special General Meetings of the Society.

CHAPTER XV.

OF DONATIONS TO THE SOCIETY.

I. Any person who shall present Books, Money, or other property to the Society, shall be considered a Benefactor thereof.

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Alfred H. McClintock, M.D., Master of the Lying-in Hospital, Rutland Square, Dublin.

James Matthews Duncan, M.D., A.M., Lecturer on Midwifery and Diseases of Women and Children, Surgeons' Hall, 55, North Castle Street, Edinburgh.

Archibald Hall, M.D., Professor of Midwifery, University of McGill College, Montreal, Canada.

William F. H. Montgomery, M.D., A.M., late Professor of Midwifery and Diseases of Women and Children, King's and Queen's College, Ireland. (Deceased.)

James Y. Simpson, M.D., Professor of Midwifery, University of Edinburgh, Physician Accoucheur to the Queen in Scotland, 52, Queen Street, Edinburgh.

FOREIGN SUBJECTS.

Walter Channing, M.D., Professor of Midwifery in the University of Cambridge, Boston, U. S.

Baron Paul Dubois, Professor of Clinical Midwifery in the Faculty of Medicine, Paris.

Charles D. Meigs, M.D., Professor of Obstetrics, &c., in the Jefferson Medical College, Philadelphia, U. S.

Franc. J. Moreau, M.D., Professor of Midwifery, &c., in the Faculty of Medicine, Paris.

F. W. Scanzoni, M.D., Professor of Midwifery, Würzburg.

Edward C. J. Von Siebold, M.D., Professor of Midwifery, Göttingen.

Rudolf Virchow, M.D., Professor of Pathological Anatomy in the University of Berlin.

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(Elected during the year 1859.)

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Alford Henry, F.R.C.S.E., Consulting Surgeon to the Taunton and Somerset Hospital, The Mount, Taunton, Somerset.

Allen, George, M.D., 14 a, Dean street, Soho, W.

Allen, James, Lecturer on Midwifery at the York School of Medicine, 16, Petergate, York.

Amsden, George John, M.D., 5, Gloucester terrace, St. John's, Hoxton, N.

Andrews, James, M.D., 8, Cornwall crescent, Camden road, N.W.

Archer, John, F.R.C.S.E., Surgeon to the Birmingham Lying-in Hospital, Deritend, Birmingham.

Arden, Arthur Octavius, Surgeon to the Hull Lying-in Charity, 29, Nile street, Hull.

Aspinall, Thomas, Over Darwen, Lancashire.

Aveling, James H., M.D., 5, Howard street, Sheffield.

Ayling, William Henry, 136, Gt. Portland street, W.

Babington, C. Metcalfe Stuart., F.R.C.P., Physician-Accoucheur to Queen Charlotte's Lying-in Hospital, and Assistant Physician to the Hospital for Sick Children, 29, Hertford street, Mayfair, W. *Council.*

Badgley, Francis, M.D., 43, Albion street, Hyde Park, W.

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Ballard, Thomas, 10, Southwick place, Hyde park, W.

Bannister, John Henry, 436, Oxford street, W.

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Barker, Samuel, M.D., 15, St. John's Villas, Upper Holloway, N.

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Barnett, Thos. W., 72, Fore street, Limehouse, E.

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Berry, Samuel, F.R.C.S.E., Surgeon-Accoucheur to the Queen's Hospital, and Professor of Midwifery and the Diseases of Women and Children in the Queen's College; 11, New Hall street, Birmingham. *Vice-Pres.* 1859.

Bevan, John, Aigburth, Liverpool (deceased).

Billinghurst, Henry, 5, Church row, Islington, N.

Bird, Frederick, M.D., Lecturer on Midwifery and Diseases of Women in the Westminster Hospital School of Medicine, Senior Physician to the Westminster Maternity Charity; 62, Park street, Grosvenor square, W. *Council*, 1859.

Blackstone, Joseph, Park House, Gloucester road, Regent's Park, N.W.

Blake, Valentine W., F.R.C.S.E., Surgeon to the Birmingham and Midland Counties Lying-in Hospital, Lecturer on Midwifery at the Sydenham College; 6, Old square, Birmingham.

Blenkinsop, Henry, F.R.C.S.E., Senior Surgeon to the Warwick Dispensary, Jury street, Warwick.

Bloxam, W., M.D., Lecturer on Midwifery at the Grosvenor Place School of Medicine; 28, Duke street, Grosvenor square, W. *Council.*

Bloxam, W. Jun., 21, Mount street, Grosvenor square, W.

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Brown, Richard, M.D., Adelaide Lodge, Cliftonville, Brighton.

Brown, Edward Adolphus, Eastwood, Notts.

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Elkington, John, Uttoxeter, Staffordshire.

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Evans, Thomas Robert, M.D., Coltishall, Norfolk.

Evershed, Thomas Evans, Billingshurst, Sussex.

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KENT, WALTON, Walsham-le-Willows, Ixworth, Suffolk.

KIALLMARK, HENRY WALTER, 46, Princes square, Westbourne, W

KIMBELL, JONATHAN HENRY, Manor House, Knowle, Birmingham.

KING, RICHARD, M.D., Physician-Accoucheur to the St. George's and St. James's Lying-in Charity; 17, Savile row, St. James's, W.

LEE, NEWTON B.C., 11, Talbot terrace, Talbot road, Bayswater, W.

LANGMORE, J. CHARLES, M.B., F.R.C.S.E., 20, Oxford terrace, Hyde Park, W.

LATTEY, PARKE PITTAR, L.R.C.P. Ed., Surgeon to the Paddington Dispensary, 53, Cambridge terrace, Hyde Park, W.

LEECH, EDWARD, Pallant, Chichester, Sussex.

LEVER, C. J. W., M.D., Wellington street, London Bridge (deceased). *Vice-Pres.* 1859.

LEWIS, T. JOHN KENRICK, Surgeon to the Wrexham Infirmary, Hope street, Wrexham, Denbighshire.

LOCOCK, SIR CHAS., Bart., M.D., First Physician-Accoucheur to H.M. the Queen, Consulting Physician to the General Lying-in Hospital, &c.; 26, Hertford street, Mayfair, W. *Honorary President.*

LOVE, GEORGE HEGINBOTHOM, M.D., Surgeon to the Royal Maternity Charity, 117, Old street, St. Luke's, E.C.

LITCHFIELD, VINCENT, 28, Addison road, Kensington.

MACKENZIE, FREDERICK WILLIAM, M.D., Senior Physician to the Western General Dispensary, and Physician-Accoucheur to the Paddington Maternity; 11, Chester place, Hyde Park Gardens, W. *Council,* 1859.

MACKINDER, DRAPER, M.D., Consulting Surgeon to the Gainsborough Dispensary, Gainsborough, Lincolnshire.

MACKINLAY, JOHN, M.D., Isleworth, Middlesex.

MACLAREN, ALEXANDER C., 29, Harley street, W.

MACRAE, JOHN, 4, High street, Lewes, Sussex.

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MARLEY, RICHARD, Bromyard, Herefordshire.

MARSHALL, PETER, 42, Bedford square.

MARSHALL, JOHN BRAKE, 21, Princes street, Hanover square, W.

MARTYN, WILLIAM, F.R.C.S.E., 6, Trevor terrace, Rutland gate, Brompton, S.W.

MEADOWS, ALFRED, M.D., Assistant Physician for Diseases of Women and Children to King's College Hospital, Physician-Accoucheur to the St. George's and St. James's Dispensary; 9, Cavendish place, Cavendish square, W.

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NEWNHAM, WILLIAM, Richmond villa, Tunbridge Wells, Kent.

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ADVERTISEMENT.

The Council of the Obstetrical Society of London deems it proper to state, that the various Communications and Essays which appear in the present volume are published on account of their general merit and interest. The several authors are alone responsible for the facts from which they deduce their observations, as well as for the opinions and reasonings set forth in their papers.

ADDRESS,

DELIVERED AT THE

FIRST MEETING OF THE SOCIETY,

JANUARY 5TH, 1859.

BY THE PRESIDENT,

EDWARD RIGBY, M.D., F.R.C.P., &c.

GENTLEMEN,—We are met together this evening, to celebrate the opening of a new medical society; which, although confining itself to one department of the healing art, will, I trust, receive the interest and approbation of the profession in general, not only because this department is one of great importance, and one in the practice of which the majority of our medical brethren are engaged, but also because among the medical societies of the British metropolis it has remained most unaccountably unrepresented up to the present time.

Not merely because it is respectful and also customary for a speaker, placed by such an audience in the responsible position in which I, through your flattering kindness, have now the honour to stand, I now express to you how deeply I feel this honour and this responsibility, but, because, gentlemen, I should also be wanting in justice to myself, if I did not endeavour to express, however imperfectly, the consciousness of my inability to fill, to my satisfaction, the distinguished office of President of the Obstetrical Society

of London, and how much I must look to your indulgence in pardoning the many deficiencies which I am but too conscious of. As far as it is possible to counterbalance these deficiencies by hearty zeal, and my best endeavours to aid the progress and success of this society, I think I may safely promise my earnest co-operation, and that no effort on my part shall be wanting to promote its interests to the utmost in my power.

It is, indeed, difficult to explain, and I shall not attempt to do so, why, in the greatest metropolis of the world, and amidst the numerous medical societies which have been established in it, and which have long since proved their value in collecting and diffusing practical information, a society for the promotion of Obstetric knowledge is only now commencing—the more so as, for many years, Obstetric societies have flourished in several of the universities and metropolitan cities, not only of the continent, but even close at home in our own country; and I am sure you will join me in a cordial expression of thanks to those gentlemen, who have not only had the merit of starting the idea, but who have devoted themselves with such praiseworthy zeal and energy to the establishment of a society which, I am confident, will soon be second to none, either in its extent or usefulness.

When we consider the vast amount of Obstetric practice and observation which is daily and hourly going on, amidst the huge population in and around London, and in the densely peopled districts of the provinces, we shall all feel with regret, that an enormous stream of valuable experience has been allowed to run almost entirely to waste for a long succession of years. In saying this, I of course do not allude to the more distinguished members of this department of the medical profession, who have zealously availed themselves of those rare opportunities of observation, and of gaining extensive experience which have been afforded them by their hospital and consultation practice, and whose valuable writings, whether in separate works or in the medical journals of the day, we all gratefully acknowledge, but I

allude more especially to that numerous body of our brethren extensively engaged as general practitioners, who spend long and active lives in the practice of midwifery, and who would undoubtedly be able, through the medium of a society like this, to contribute inexhaustible stores of Obstetric experience of the highest interest and value, and which, but for such an opportunity, have hitherto remained uncommunicated, and therefore, lost to the main body of the profession. I believe, therefore, that I am not only expressing my own opinion, but that of the gentlemen who have promoted the formation of this society, in saying that we shall look with especial interest to the general practitioners for the extensive results of their Obstetric experience, which, must necessarily be of great interest as well as value.

Do not imagine that I wish, in the slightest degree, to undervalue the experience and learning of those of our brethren, whether in the provinces or in the metropolis, who honorably hold a high position in Obstetric science; I know we may surely count upon them as valuable contributors; but, at the present moment, I address myself more especially to our brethren in general practice, because I conceive that it is chiefly from the want of such a society as this, that there has been no opportunity for collecting those stores of obstetric observation and experience which we may now hope to receive from them.

A metropolis—and especially one by far the largest in the civilised world, teeming with the population rather of a small country than of one capital city, is a field which must afford endless scope for the most extended observation, and offers means and opportunities for gaining knowledge and experience, which, in the strictest sense of the words, are boundless and inexhaustible. It is on a field like this, where you will ever find the greatest numbers of skilled observers and practitioners, and where large bodies of them are banded together for the purpose of collecting, communicating, and thus diffusing the results of their united experience. It is well known that such combinations, or societies, as they are called, have been productive of the greatest possible advantage, not only

to themselves and to their members, but also to the public at large.

The history and success of the various medical and other scientific societies of London, prove this fact beyond all question. The medical societies of London for many years have been distinguished by their great importance and extent, by the high rank they so deservedly hold in the estimation of the profession, by the inestimable value of their transactions, by the great benefits they have conferred on medical science, and by the still greater benefits which have accrued, by means of the discoveries and improvements which they have enunciated.

In these respects, and in these advantages, it must be acknowledged, that medicine and surgery have long got the start over the Obstetric branch of the profession. Backed by the noble hospitals of this metropolis, which afford such ample means for observing and gaining experience in every form of disease and injury to which the human frame is liable, they have collected and concentrated their rich treasures of accumulated knowledge in these societies, which have become, as it were, the archives, and in one sense of the word, the representatives of these two important departments of the healing art. It must not, however, be supposed that, because our lying-in hospitals are too few and too small to supply an equal amount of observation and experience, that Obstetric practice is without the means of furnishing advantages of a similar character. The prodigiousness of the population by which we are surrounded, and the important fact that the large majority of medical men are necessarily engaged in Obstetric practice, prove that the field of observation, so far from being smaller, is, in fact, infinitely greater; for the most part, however, it is not supplied by hospital practice, it is supplied essentially by individual and private practice, whether in the higher or the lower ranks of society. At the slightest glance, therefore, it is evident that a field of observation such as this, must, in its extent and variety, far exceed those of the other branches of the healing art. It is only in an institution like

that which I have the gratification and honour to open this evening, that the accumulated experience of so large a body of the medical profession can be properly collected and concentrated, so as to turn such inestimable stores of knowledge to good account, and render them available and useful to the profession at large.

When we glance over the Obstetric literature of former years, not only of this country but of the continent—what, I would ask, are the works, whatever their age may be, which have stood the test of time, and which, among the numerous changes produced by improving and increasing knowledge, are still "monumenta ære perenniora"? While systematic, and, for their time, learned works, have long since sunk into oblivion, it will be found that those simple records of the experience of long lives, devoted with ardent zeal to the cultivation of Obstetric knowledge, retain their value up to the present moment, and will doubtless continue to be consulted and referred to by succeeding generations as mines of invaluable practical information. If we look back to the records of midwifery practice which appeared in France during the last and preceding centuries—I do not allude to the ponderous and well-filled systems, or their lighter successors, the hand-books, but I allude to the records of cases in midwifery in the practice of men of great experience—what a magnificant treasure, for instance, do we find in the work of Mauriceau! I do not refer to his early systematic work in 1688, because I am convinced that, but for the great name he so deservedly earned by his celebrated volume of cases published with the later editions of that work, it would have been by this time nearly, if not entirely, forgotten—but I allude to that magnificent collection of valuable and interesting cases made between the years 1669 and 1704, which even at this present day we may consult with profit and instruction.

Among others, how interesting it is to read the case where he speaks of the celebrated Dr. Hugh Chamberlen, of forceps notoriety, who was then in Paris, trying to sell his secret. We can fancy the ire of the little man, when, having de-

clared that a poor deformed woman could not be delivered, except by the Cæsarean operation, he was informed that a certain English practitioner named Chamberlen, who was then in Paris, had expressed his surprise that so clever a man as Mr. Mauriceau could not deliver her, as he, by means of a secret in his possession, could easily do it in a "demi quart d'heure"—a half quarter of an hour. Chamberlen's failure, and the death of the unfortunate patient are well known. When Chamberlen called to take leave, Mauriceau played his return game, informing him he was under a considerable mistake, if he supposed it was as easy to attend women in labour in Paris as it was in London!

The smaller, but not less valuable collection by Paul Portal, begun and terminated some years earlier than that of Mauriceau, but not published till 1685, and that also by La Motte in 1721, gave France an honorable priority over those countries, where works of a similar kind had not appeared: we thus learn that, even without the aid of the forceps, midwifery practice had there attained a high grade of cultivation.

It is interesting to observe, and strongly confirms my previous observation, how entirely forgotten is that ponderous quarto, that mass of learning in those days, with its proud, haughty title, the "Novum Lumen Obstetricantibus" of Heinrich van Deventer, published in 1701, a work which, for many years afterwards, continued to be regarded as a leading authority, indeed as the great authority in midwifery; some of this author's dogmata, especially on the effects of obliquity of the uterus on the position of the child, reached even to the present century; but the "Novum Lumen" has lost its brilliancy, and is nearly extinguished amidst the dark and misty vistas of distant times, while the smaller but more enduring stars of Portal and La Motte still continue to shed their lustre on Obstetric literature, with undiminished brightness, though over a longer lapse of years. With what pleasure do we peruse the interesting and not unfrequently complicated and dangerous cases in La Motte's book, told in that simple unaffected language which, of itself, would sufficiently

vouch for the author's accuracy, had we not the rare opportunity, also, of seeing his failures and unsuccessful cases detailed just as openly and honestly as his most successful ones: hence it was that the illustrious Haller honoured La Motte with the title of "Homo sincerrimus." There is a quiet bonhomie in his introduction, which makes us feel as if we had been actually acquainted with the worthy country practitioner of Valognes, near the French coast, not twenty miles from Cherbourg, when he says, "As I live in the extremity of a province surrounded by the sea almost on every side, and practice chiefly without physicians or surgeons to consult with, I am forced to use the means which good sense and reflection furnish me with to help nature, without submitting to all the rules generally received. I have set down my thoughts in the best manner I could, having less pretence to learning than experience." And we can almost fancy we see a party of friends sitting down with him to breakfast on oysters and that white wine of his, which was pronounced to be so excellent, and attended by that red-haired servant maid, who was supposed, some days afterwards, to have spoiled the rest of the wine by the unlucky colour of her hair. There is a passage in La Motte's work, for which I shall ever feel grateful to him; for it has been my comfort as well as my guide in many a weary lingering case. He says, "I am always easy with a woman, let her labour be never so long, provided the membranes are not broke, never opening them myself, unless some unlucky accident at first, or to be feared afterwards, forces me to it."

Let us now turn to our own country. In 1725—seven years after the publication of La Motte's work—William Giffard, a surgeon, commenced recording the results of his midwifery practice in London. It must have been very extensive; for, in the short space of six years, Giffard had collected no less than 225 cases of rare and difficult labour, occurring under his own observation, and treated by himself. The account of him is, that "he was a plain man, remarkable for an honest frank behaviour." Giffard died in 1731, and his collection was published in 1734. Giffard's

cases rival those of La Motte, and form a collection of valuable experience which cannot be surpassed even at the present day.

The next great collector of Obstetric experience was Dr. Smellie. Indeed, we look upon him as the founder of the English midwifery of the present day; and his two volumes of cases, published more than a century ago, and accompanied with valuable practical remarks, are treasures of Obstetric knowledge, the value of which remains undimmed by time, and come down to us as fresh as if they had been only just published.

I might pass on to other collections of great value, of a more special character, but it is not so much my object to pay a tribute of respect to the memoirs of these great fact collectors in midwifery, as to point out to you the important circumstance, that the value of their works remains the same as when they were first published, unchanged by the lapse of time. Now, if the practice of one man, as in the case of Mauriceau, La Motte, or Giffard, can produce collections of facts which have immortalised their names, and conferred lasting benefits on this department of the healing art, how much more useful and important will be the combined efforts of two or three hundred fact-collectors, concentrating all the results of their practice and their observations into one great depository, viz., the Obstetrical Society of London.

A time will come, I feel assured, when the Obstetrical Society of London, with the prodigious advantages which are afforded it by our enormous population, and by the large and united body of its intelligent members, will possess treasuries of knowledge far exceeding those of any joint-stock bank of science of the present day, and which will place it on a more enduring basis, and enable it to pay richer and more permanent dividends of science than any of those similar institutions of our monied brethren. We shall have a numerous list of fact-collectors and depositors, not only from every county of the United Kingdom, but also from our foreign members, and still more from the

many correspondents in those extensive colonies over which the sun never sets, all contributing vast funds of scientific facts and priceless knowledge, gleaned from varieties of the human race, living under every modification of climate, habits, and grades of civilisation; and furnishing us with such an amount of accumulated science as will raise this society to the loftiest pinnacle of dignity and importance.

I pray your indulgence, gentlemen, if I have rather tired your patience, in dilating upon what appears to me to be the great object, and what will form the great strength and importance of this society—I mean the collecting valuable facts on questions of Obstetric practice. But there is another point which I must not omit, for it concerns us personally in no small degree—I allude to the effects it will produce on our social position. In the first place it brings together the members of this department of medical practice—it enables us to know each other—it binds us together with a social bond which must ever be, not only a source of sincere satisfaction, but of mutual improvement and advantage. The friction of different minds earnestly engaged in similar pursuits, is peculiarly valuable—for it is scarcely possible for any man, who has felt the responsibilities and experienced the hours of painful anxiety which are ever connected with the management of difficult and dangerous cases in midwifery, not to have meditated so deeply on these subjects as to have gained some original thoughts which he may communicate with benefit to his professional brethren. It raises us in our social and in our public position; to be a member of this society cannot but be an honorable distinction, as well as a positive recommendation in practice, for it is a proof, not only that the member is in close and immediate communication with the great body of his brother-practitioners in this department of the healing art, but that he has at his command those accumulated stores of experience which place him on a par with the most distinguished ornaments of his profession, and rank him among that great band of fellow-workers who are earnestly devoting the best years of their existence to the noble cause of allay-

ing suffering and preserving life, among that class of patients who must ever hold the first and foremost claim upon our interest, our sympathies, and our affections.

It is with feelings of no slight gratification and pride that we have already received an amount of interest and support from all classes of our Obstetric brethren, both in London and in the provinces, far exceeding our most sanguine expectations, a fact which fully justifies me in asserting, that it was no vain boast when I stated my confidence that the Obstetrical Society of London was destined to rise quickly to the highest position of dignity and importance.

Long may this new society prosper and flourish—long may it be a bond of union and friendship among its numerous members—long may it continue the great centre of collected English knowledge and experience in this department of the healing art, and extend its beneficial influences over the length and breadth of the land. Gentlemen—Brother-members—it is a great, a good, and a holy cause; and, in conclusion, I humbly pray that the Great Author of Good, who seeth in secret, and knoweth the imaginations of our hearts, and who rewardeth openly, may be graciously pleased to bless these endeavours of His creatures with success.

NOTES OF A CASE

IN WHICH THE OPERATION FOR THE INDUCTION OF ABORTION WAS PERFORMED IN A PATIENT LABOURING UNDER

CANCEROUS DISEASE OF THE UTERUS AND RECTUM;

WITH

OBSERVATIONS UPON THE JUSTIFIABILITY OF THE OPERATION IN SUCH CASES AND THE BEST MODE OF PERFORMING IT.

BY

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Read Feb. 2nd, 1859.

On the 26th of November, 1858, I was requested by Mr. Moullin, Surgeon to the Westbourne Dispensary and Maternity, to visit Mrs. Brooker, a patient of that institution, who had been for some time under his care for cancerous disease of the rectum; and the question more especially to be considered was, whether, inasmuch as she had become pregnant about fourteen weeks previously, it would not be advisable to arrest the further progress of pregnancy by the induction of abortion, and if so, the best means of carrying out such intention.

On examination, I found a firm, scirrhous contraction of the rectum, about four inches above the sphincter, formed by a deposit in the coats of the bowel, which projected into its interior, of about the size and conformation of an ordinary

cervix uteri. The point of the finger could just enter the constriction, which was in the centre of the deposit, and below it another scirrhous induration could be felt in the anterior wall of the rectum, which was about the size of a hen's egg, and very painful and tender on pressure.

On examining the uterus, the body and cervix were found expanded to within about an inch of the os uteri, and the anterior segment of the cervix was found to be the seat of a hard, scirrhous deposit, of about the size of a pigeon's egg. This did not project anteriorly or externally from the cervix, but could be distinctly felt projecting into the interior of the cervical canal, just within the os uteri. The posterior segment of the cervix was soft and free from disease, and on examining the organ subsequently with a speculum a pearly, opaque appearance was seen upon its anterior surface, corresponding with the part from whence the scirrhous deposit originated, which could be felt projecting into the cervical canal. Otherwise, the condition of the cervix, as observed through the speculum, was healthy; it was of a pale-rose colour, and free from any inflammatory or ulcerative appearance.

As, then, there could be no doubt that serious cancerous disease existed both in the rectum and uterus—as this was apparently increasing, and might ultimately encroach so largely upon the pelvic cavity as to render delivery at an advanced period of pregnancy either dangerous or impossible—I had no hesitation in acquiescing in the view taken by Mr. Moullin, that the further progress of pregnancy ought to be arrested, and delivery at once effected; it was further agreed that the uterine douche should be the means first employed for this purpose.

Accordingly, on the 1st of December, 1858, at about four p.m., the necessary proceedings were commenced, in the presence of Dr. Handfield Jones and Mr. Norway, Mr. Moullin and myself being the principal operators. The patient was placed on her left side, in the ordinary obstetric position, with her nates projecting somewhat over the edge of the bed. About two gallons of tepid water were then

placed on a chair in her immediate vicinity, and a strong enema-syringe, having a long, elastic tube, with a metallic pipe at its extremity, was used for the purpose of injecting the water. With two fingers introduced into the vagina, I kept the orifice of the pipe in contact with the os uteri, directing as far as possible the stream of water into its interior, and by means of a folded towel I endeavoured to occlude the os externum, so that the water might be retained in the vagina, and thence forced into the uterus, so as to separate a portion of the fœtal membranes. In this attempt, however, I was altogether unsuccessful; the water escaped out of the vagina almost as readily as it was injected into it, and the greater part of it had been expended before any appreciable effect was produced. Under these circumstances it was proposed to introduce the pipe of the syringe directly into the interior of the cervix, and to accomplish this the organ was brought into sight by means of a speculum, and some water was thus injected into the interior of the uterus. This proceeding had a very decisive effect. The patient almost immediately complained of severe uterine pain, and labour-like pains continued to occur at intervals during the remainder of our visit. At about half-past eight p.m. she was again visited, and had still occasional pains. She was therefore directed to take a few doses of ergot, at intervals of four hours, with the view of supporting the uterine action which had thus apparently been initiated.

On the following morning, December 2d, it was found that uterine pains had returned at intervals during the night until two a.m., when they entirely ceased. At eleven a.m. Mr. Moullin injected some tepid water into the uterus, which was again followed by much pain, which continued at intervals until one p.m. It then ceased, and did not return until three p.m., when pains again set in, and continued to recur at intervals throughout the day, so that on visiting her in the evening no further operative proceeding was deemed necessary.

On the following morning, December 3d, we found that the pains had ceased at eleven o'clock the previous night,

and had not again returned. Under these circumstances, a different course of proceeding was decided upon. The ordinary uterine douche, copiously employed, had been found altogether ineffective, whilst the direct injection of the uterus had been found most effective in promoting uterine action. Instead, therefore, of injecting the vagina with tepid water, we determined to inject the uterus; and instead of using a common enema-syringe, with an ordinary enema-pipe, capable of injecting several gallons of water, we decided upon using a bladder-syringe, capable of holding only from four to six ounces, but having a tube attached to it capable of being more easily passed into the cervix uteri. Unfortunately the tube at first selected was found too large for the purpose, and a very unsatisfactory attempt was made to inject the uterus, which was followed by no result. At half-past eight p.m., however, a more effective instrument was employed, which consisted of the bladder-syringe, having a large-sized german-silver catheter attached to it, its side-openings having been closed by sealing-wax, and a large orifice cut in its extreme point. This was found to pass readily into the cervix uteri, and in this way about four ounces of tepid water were injected into the interior of the organ. The effects of this proceeding were most decisive. The patient felt instantly severe pain in the uterine region, a coloured discharge followed the injection, and uterine pains continued to recur frequently during the period of our visit. So marked were these effects, that we left in the expectation that the contents of the uterus would be expelled in the course of the night.

At eleven a.m. the next morning we were, however, disappointed in finding that the pains had entirely ceased within half an hour of our departure, and had not again returned. They had been apparently stopped by the supervention of rigors, which had occurred at intervals throughout the night, and the patient had moreover become very nervous, hysterical, and depressed. In this state of things it was felt that neither the uterine douche nor injection could be safely repeated, and it became a question whether a sponge-tent

introduced into the cervix uteri, or galvanism, should be resorted to for the purpose of exciting uterine action. Our experience of the uterine douche, or rather injection, had hitherto led us to believe that, whilst it was capable of initiating uterine action, it was incapable of supporting it beyond a certain inadequate period, and that, exclusively trusted to, the period of labour might be indefinitely postponed. Aided, however, by some other agency capable of sustaining the action thus commenced, it appeared to us that a more decided effect might be produced; and of the two agencies proposed for this purpose the galvanic current was the one selected, both because it could be made to exercise a sustained stimulating action upon the uterus, and at the same time an invigorating influence upon the nervous system of the patient, which, previously much disturbed, had now become extremely irritable and depressed. Accordingly, at four p.m., a galvanic current was applied so as to pass through the uterus from the upper portion of the spinal cord, the positive pole being placed upon the nape of the neck, whilst the negative was applied, by means of a vaginal director, to the cervix uteri. The current was continued uninterruptedly for a period of four hours, when, on visiting her at half-past eight p.m., we found her in every respect better. The shiverings had ceased, and a warm perspiration pervaded the skin; she felt stronger, was more cheerful, and less desponding. Occasional pains and uneasiness had been felt in the region of the uterus during the application of the current, and before its removal a pain was felt for the first time in the lower part of the back, which subsequently extended round to the hypogastrium, and was eventually superseded by active expulsive pains. On removing the vaginal director the os and cervix uteri were found softer and more expanded, and the vagina plentifully lubricated with mucus.

On visiting the patient at three p.m. the next day (December 5th), it was found that active labour-pains had set in. She had been obliged to take to her bed in the early part of the day, and had several decided expulsive

pains, which had gradually increased in force and frequency. It appeared that during the night the pain which had commenced in her back previous to the removal of the galvanic current had become extended by degrees to the hypogastrium, and that expulsive pains, at distant intervals, had supervened upon it. These, during the morning, had become more frequent, and ultimately ended in strong rhythmical pains, which, continuing until half-past four p.m., ended in the expulsion of the fœtus and placenta, with comparatively little hæmorrhage or pain.

The subsequent progress of the case may be comprised in a very few words. The patient's recovery was both rapid and satisfactory, she experienced throughout scarcely any hæmorrhage or pain, and remarked that she had less of either than after her ordinary labours. She remained recumbent for about a week, and on then resuming her domestic duties felt stronger and better than she had been previously to the operation.

Remarks.—In connexion with the foregoing history two questions of a practical character suggest themselves, to which alone I will very briefly invite the attention of the Society. First, the validity of the grounds upon which the operation for the induction of abortion was undertaken; and secondly, admitting the operation to have been justifiable, was it best effected by the means employed? Upon the right solution of these questions two very important corollaries are deducible, viz.—first, the propriety of the induction of abortion in cases of prospective difficulty to delivery; and secondly, the best means of effecting it when its necessity is admitted.

With regard, then, to the first of these questions, I believe I may assume that two series of objections may be raised to the operation in question. First, by those who object to its performance altogether, on the grounds of morality and propriety; and secondly, by those who, while admitting its expediency in certain cases, would not include the circumstances of the present within the category of causes

which should justify our resorting to it. To the former class of objectors, however, I shall be satisfied by remarking that as early as the year 1768, the question of the propriety and morality of the operation was authoritatively decided in the affirmative at a congress of the most eminent English accoucheurs, amongst whom the respected name of William Hunter stands prominent; that the highest obstetric authorities in France, including Fodéré, Marc, Velpeau, and Cazeaux, have subsequently recognised its propriety, and that so recently as the year 1856 we have, in England, an eminent obstetrician, Dr. Robert Lee, expressing publicly his opinion, that the operation in question was one of the greatest improvements ever introduced into obstetric practice. With such authorisation we may, I submit, dismiss the question of the inexpediency of the operation upon merely moral and social considerations.

But to the second class of objectors, those who would restrict the operation exclusively to cases attended with immediate danger or peril to the mother, a more reasonable dissent may be expected; for in this no immediate danger to the mother from pregnancy existed, nor was there any immediate necessity for determining it. Let me, then, state the case in relation to the operation in the simplest terms. A pregnant female is afflicted with malignant disease of at least two important organs occupying the pelvic cavity—the rectum and the uterus. Under the most favorable circumstances, the functions of the bowel are performed with great difficulty, she is tormented with frequent efforts to relieve it, which are for the most part futile, the cervix uteri is the seat of a large scirrhous deposit, and a similar deposit is found in the recto-vaginal septum. Under these circumstances, can the business of pregnancy be expected to progress favorably, and what are the chances of an ultimately safe delivery? Is it not certain that the already impeded functions of the rectum and alimentary canal will undergo still greater obstruction as pregnancy advances, and the pressure of the gravid uterus becomes superadded to the impediment arising from the organic contraction of the

bowel? Is it not likely that the scirrhous deposits in the uterus and pelvis will progressively increase during the remaining months of pregnancy, and may they not thus be expected to encroach so seriously upon the maternal passage as to compromise at least the life of the child, if not that of the mother also? What again, it may be asked, is likely to be the effect of the combined influences of pregnancy and malignant disease upon the constitution of the mother? So far from the former arresting the progress of the latter, we have grounds for suspecting, from the statistics of a similar malady, that it may rather hasten it than retard it, and that a constitution already damaged and failing, may be hopelessly prostrated before the full period of gestation. Such are the views by which we were influenced in deciding upon the expediency of the operation, and such are the views the validity of which I would wish to submit to the scrutiny and judgment of this Society.

But secondly, as to the best means of inducing abortion when the operation is decided upon, I have reason to believe that the experience derived from the present case may be usefully turned to account. And here it is necessary to observe, that this is a question widely different from that of the induction of premature labour in the latter months of pregnancy; for inasmuch as the irritability and contractility of the uterine fibre are much less developed in the earlier than in the latter months of gestation, we might assume that the means which would be successful for the induction of premature delivery would be inadequate for the induction of abortion. And so in reality it was found in the present case; for whilst the application of the uterine douche may generally be relied upon for the induction of premature labour in the latter months of pregnancy, it was found in our hands to be altogether inadequate for the induction of abortion in the third. Discarding, then, the use of the douche, we have two other methods left to choose from; the one being the employment of sponge-tents, the other, puncture of the membranes. Of these methods, however, I would observe—first, that as regards the latter, on theoretical

grounds, the necessity of preserving the membranes intact must be generally admitted, as essential to the favorable expulsion of the ovum; and secondly, that, practically, in the only case in which I have had occasion to resort to it, the results of the practice were of a very unfavorable character—the expulsion of the ovum having been delayed for many days, and such alarming hæmorrhages having occurred in connexion with and subsequent to its expulsion. On the other hand, the employment of sponge-tents is a practice as to which further experience is necessary to enable us to determine its value. In a case published, I believe, by Baron Dubois, in which they were tried, several days elapsed before expulsive action supervened, and not, if I remember rightly, until after the membranes had been punctured.

The practice, then, pursued in the present case was one of a somewhat novel, if not of an original, character, and consisted in the direct injection of tepid water into the uterus, so as to effect a partial separation of the membranes. The safety of this proceeding was clearly established, and its results were so satisfactory, that I am induced to recommend it strongly to the notice of the profession. Nevertheless, I am equally persuaded that the success of the operation would be greatly aided in any case by the subsequent application of a sustained current of electricity, as already described. By this the uterine action initiated by the operation is supported and maintained, by it the ensuing uterine contraction is rendered more perfect and effectual, and by it the expulsion of the ovum is more safely and perfectly effected. We found, for instance, in the present case, that it was accomplished with comparatively little hæmorrhage or pain; that the expulsion, both as regards the ovum and its appendages, was completed within twenty-four hours after its application; and that the recovery of the patient was both rapid and favorable. Contrasting the progress of this case with the only other in which I have had occasion to induce abortion, and to which I have briefly alluded, I can have no difficulty in bearing testimony to the superiority of the practice pursued in the present case.

Lastly, from the whole of the facts laid before the Society, I would venture to deduce the following corollary—that in any case in which the induction of abortion is felt necessary, the most safe and direct means of inducing it are the injection of a few ounces of tepid water into the interior of the uterus, so as to detach a portion of the fœtal membranes, and the subsequent application of a sustained current of electricity for a given period, varying with the necessities of the case. Compared with the inutility of the uterine douche on the one hand, the danger of puncturing the membranes on the other, and not overlooking the doubtful efficacy of sponge-tents, it appears to me that this is the preferable proceeding, and one which may be relied upon in any case for speedily and favorably effecting the expulsion of the ovum in the early months of pregnancy.

ON THE

ABOLITION OF CRANIOTOMY

FROM OBSTETRIC PRACTICE,

IN ALL CASES WHERE THE FŒTUS IS LIVING AND VIABLE.

BY

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Read Feb. 2nd, 1859.

Statistics prove that the operation of craniotomy is performed, in British practice, in about 1 in every 340 labours. The whole number of births in England and Wales exceeds 600,000 per annum, and if we apply the proportion of 1 in 340 to these figures, we obtain a total of about 1800 cases of perforation annually. This is as though every year, all the children born in London, with a population approaching 3,000,000, during rather more than one week, were sacrificed; or as if all the children produced during each year in such a county as Westmoreland, or such a city as Bath, with populations of 60,000, were born dead. The mortality to the mothers from craniotomy is about 1 in 5 cases, in British practice, which would give, in England and Wales, a maternal mortality from this cause of rather more than 350 per annum. Thus, the deaths of upwards of 2000 women and children annually in this country may fairly be referred to the performance of craniotomy. These figures convey a just idea of the importance of the subject under consideration.

Craniotomy is the oldest capital obstetric operation. We can trace it back to the time of Hippocrates, or upwards of

2300 years. It was a rude attempt devised in the infancy of obstetric art, to rescue the mother at the expense of the child, in cases of otherwise insuperable difficulty. The hook and the perforator were, probably, the first midwifery instruments ever invented. The mode of performing the operation has been improved, but the results are probably much the same as when it was first practised. It is unfortunately the easiest, as well as the most deadly operation, to which the obstetrician can resort. It is held in different estimation in different countries. In British practice it is performed, taking the average of large numbers, twice as often as in France, and four times as often as in Germany. The operation is resorted to by some obstetricians with comparative frequency, while others of equal reputation, rarely have recourse to it. Thus, Dr. Clarke, of Dublin, craniotomized in the proportion of 1 in 248, and Dr. Collins in 1 in 141; while in Paris, Baudelocque performed it only in 1 in 2898, and Siebold, of Berlin, in 1 in 2093 cases. If we take the extreme numbers, Dr. Collins used the perforator nearly 15 times, where Baudelocque employed it once. Considering the nature of the operation as regards the child, and the danger to the mother, it is evident that its diminution or abolition is one of the highest, and at the same time one of the most unsettled questions, which can engage the attention of obstetricians. It is especially important in this country, because the operation has long been accounted, by foreign authorities, the opprobrium of our national midwifery.

We cannot survey the progress of obstetrics without being struck with the fact that every great discovery in this branch of medicine stands in distinct opposition to craniotomy, and has invariably tended to diminish the frequency of its performance where the child is living. This is pre-eminently true of turning, of the forceps, and of the induction of labour. Even the Cæsarian and Sigaultian sections were attempts to escape from craniotomy, by operations only a little less fatal to the mother than embryulcia is to the child. All the other improvements in obstetrics

point emphatically in the same direction. This may be said of the use of ergot and other oxytocic remedies, of the application of auscultation to obstetrics, of the knowledge of the mechanism of labour and the motor physiology of parturition, of the introduction of chloroform, of the plastic operations for the relief of injuries suffered during labour, of the better management of placenta prævia, and of numerous minor improvements in obstetric practice. Thus, as regards craniotomy, a gradual process of diminution has been going on for ages. It remains to be seen whether the time has not arrived when a stand should be made for its entire abolition, as the rule of practice, in cases in which the child is alive and viable. Believing this to be the case, I propose, in the first instance, to examine briefly the different conditions in which craniotomy is now performed, and then to consider the alternative measures which may be substituted for it. The following table exhibits the proportions in which the various states of the mother and child leading to the adoption of craniotomy or embryotomy occur. Owing to the different nomenclature employed by different observers in recording cases, the table cannot pretend to be perfectly correct; but it is sufficiently so for the purposes intended, and includes the cases of all, or nearly all, the most eminent British obstetricians who have published large numbers of craniotomy cases.

It is impossible to ascertain the precise proportion of the cases of this table in which the child was alive or dead at the time of performing the operation. In many, no reference is made to the condition of the child; in others, the evidence on this subject is very inexact and unsatisfactory. It is probable that in the great majority of cases the child was alive at the time when the decision was formed that care should be taken of the life of the mother alone. It is only in the cases given by the officers of the Dublin Lying-in Hospital, that careful examinations of the fœtal heart by the stethoscope were made before resorting to perforation. In these cases, there were very few in which the child was not dead before its actual performance. But the teachers

of this school lay it down as a rule, that in laborious and difficult labours, the child dies, almost invariably, before the mother passes into a state of positive danger. They, therefore, wait for the signs of the death of the fœtus, and until these appear they rarely perforate. There is, however, little difference between waiting for the death of the child by pressure or continuous uterine action, in cases where natural delivery is hopeless, and inflicting death by perforation. The facts also prove most forcibly that the mother is exposed to great danger by the delay which thus occurs. It is impossible, therefore, not to arrive at the conclusion, that in most of the Dublin cases the child was as much sacrificed as though craniotomy had been performed during life, and by a process involving increased risks to the mother.

Craniotomy of the dead fœtus can never be other than one of the great operations of midwifery. There must always be a large class of cases in which the child is dead at the commencement of labour, or dies during its progress, and before delivery becomes practicable, in which craniotomy or embryotomy must be resorted to for the sake of the mother. This will happen in many funis cases, in cases of accidental and unavoidable hæmorrhage, rupture of the uterus, convulsions, breech, footling, or turning cases. In all these circumstances, the child is exposed to unusual risks, and may perish under conditions in which it is of great moment to the mother that the size of the fœtus should be lessened. Here I would contend for a more prompt and invariable performance of craniotomy than has hitherto been practised. With this view, auscultation, if not practised in every labour, should at least be resorted to in all cases of difficulty; and if we can trace the failure of the fœtal heart, and ascertain the death of the fœtus long before interference to save it becomes possible, it is our bounden duty, should the state of the mother require it, to resort to craniotomy without delay. Obstetric records contain numerous cases in which danger has overtaken the mother while the attendant has been waiting, in the case of

a fœtus already dead. In this point of view, the habitual use of the stethoscope by the accoucheur becomes an imperative duty. The stethoscope ought not only to point out when the child is in danger, but should impel us to attempt its rescue. It is putting the instrument to a very ignoble use merely to apply it as a means of watching for the death of the fœtus.

TABLE OF 1000 CASES OF CRANIOTOMY OR EMBRYOTOMY, OCCURRING IN BRITISH PRACTICE.

1.	Pelvic deformity or diminution	448
2.	Impaction of the fœtal head	165
3.	Arm or shoulder presentations	72
4.	Convulsions	44
5.	Rupture of the uterus	36
6.	Funis presentations	29
7.	Arrest of labour from exhaustion	26
8.	Face presentations	23
9.	Hydrocephalus	21
10.	Accidental hæmorrhage	16
11.	Bands and cicatrices in the vagina	16
12.	Occipito-posterior presentations	15
13.	Rigidity or occlusion of the os uteri	15
14.	Unavoidable hæmorrhage (placenta prævia)	14
15.	Tumours of ovaria, uterus, or vagina	14
16.	Swelling of the vulva and vagina	10
17.	Head-with-arm presentations	7
18.	Small size of the ostium vaginæ	7
19.	Rigidity of the perinæum	5
20.	Abdominal tumours in the fœtus	5
21.	Disease of the heart and lungs	4
22.	Carcinoma uteri	3
23.	Distension of the bladder of the mother	2
24.	Twin cases	2
25.	Mania	1
		1000

It will be seen that nearly one half of the cases collected in the preceding table depend on deformity or diminution of the pelvis. This includes cases of rachitis, mollities ossium, oblique deformity, exostosis, faulty development, spinal disease, hip-joint disease, fractures of the pelvis, pregnancy occurring in young girls before the full development of the pelvis at puberty and in women of extremely small stature but without deformity, the funnel-shaped pelvis, the masculine pelvis, and all other states of the pelvic bones which interfere with the capacity of the pelvic cavity and canal. Pelvic deformity, besides being the most frequent cause of craniotomy, has always been considered as the most justifiable excuse for its performance. But if we give due importance to measures of prevention, it cannot be denied that all such cases may be met, without the necessity of craniotomizing the living child at or near the full term. With scarcely an exception, British accoucheurs recognise the propriety, in cases of high distortion where it is impossible for a viable child to pass, of inducing premature labour in the early or middle months of pregnancy. In moderate deformity, the induction of premature labour, at or near the seventh month, delivers the mother from great risk, and affords a fair chance of life to the child. There is hardly an obstetrician of repute who has not recorded cases of children saved by induced labour, after the performance of craniotomy in previous labours. In cases of moderate deformity, such as to require the induction of labour, the state of the patient ought always to be known beforehand. Where this knowledge is wanting, turning, and the use of the forceps, are, whenever practicable, the proper alternatives of craniotomy. I shall have to refer to this subject hereafter at greater length, in remarking on the three great conservative operations of obstetrics.

Under the term "impaction," many different forms of dystocia are included. With some, it means arrest of the head at the brim or outlet, from slight degrees of deformity; with others, the wedging of a large fœtal head in the brim, middle, or outlet of the pelvis. Some, on the other hand,

imply, by impaction, the arrest of labour from swelling of the fœtal head, and the soft parts of the mother, from continual pressure. The majority of the cases of impaction in this table are, as far as can be ascertained, cases of a large head, frequently in primiparæ, or of swelling of the head and vagina from protracted labour. Most of the cases which end in impaction, become craniotomy cases from the neglect of the use of the forceps at the proper time. The head, which the pelvis and uterine contractions fail to mould sufficiently, may often be elongated by cautiously and steadily using the forceps as a compressor and extractor; but the instrument should be resorted to at a comparatively early period, before inflammation of the scalp and the vagina have been induced by pressure. Many cases of impaction also arise from neglect of the bowels and bladder during the progress of the labour.

Arm and shoulder cases, ought never simply as such, to become the subjects of craniotomy. Turning, at as early a period as the os uteri will allow, is the certain mode of preventing this. If the state of the pelvis is such as to require perforation after turning, it must be because the induction of labour has been neglected. Even in cases suffered to become difficult by unnecessary delay, the use of chloroform renders turning comparatively easy.

In puerperal convulsions, I believe that craniotomy may and ought to be always avoided when the child is living. Much may be done before labour to prevent or relieve the albuminuria and dropsy, upon which convulsions generally depend. When the signs of uræmic poisoning are evident and unmanageable in the latter months of pregnancy, induced labour is the proper treatment. Many cases of puerperal convulsions are recorded, in which the heads of living children were broken up because the mothers could not be kept quiet while the forceps were applied or turning performed. Chloroform entirely and most beneficially relieves us from cases of this kind. In others, perforation is practised because the os uteri is undilated. In such cases the os may be opened, either by the injection of warm

water into the cavity of the uterus, or by the colpeurinter or fluid vaginal pessary, as practised by Braun, of Vienna. These two methods of force-delivery are superior to any hitherto in use, and will often enable us to dilate the uterus and complete labours in a few hours. There are scarcely any cases in which the results of craniotomy are more dangerous to the mother, than puerperal convulsions.

In rupture of the uterus, whenever the child can be extracted by craniotomy, the woman can be delivered as safely by turning or the forceps as by this procedure, and the child, if alive, has the chance of safety. Much may be done by a knowledge of the motor physiology of labour to prevent rupture of the uterus.

In arrest of labour from exhaustion, we may substitute stimulants, the ergot of rye, galvanism, turning, or the forceps, for craniotomy. Many of the cases in this class depend on improper delay in the use of the forceps.

In nearly all the funis cases, the cord had ceased to pulsate, and evidence of the death of the child existed, before craniotomy was resorted to. Turning or the forceps ought, if possible, to be employed in all cases where the child is alive, and where delivery cannot otherwise be effected.

In occipito-posterior presentations, there is no excuse for craniotomy. Such cases may always be converted into occipito-anterior presentations by the use of one or both blades of the forceps, or they may be delivered by the forceps in the occipito-posterior position, though this ought to be avoided if possible.

In obstructed labour depending on morbid conditions of the maternal soft parts, it has been a common practice to resort to craniotomy. I believe in the possibility of abolishing this operation in all such cases. In occlusion or obliteration of the os uteri, incisions into the os and cervix, with dilatation, so as to allow of the passage of the head, have been practised on many occasions successfully, while the alternative operations of craniotomy or the Cæsarian section are full of danger. In swelling or occlusion of the vagina, or rigidity from cicatrization after injury, the induc

tion of premature labour or incising or breaking down bands and adhesions, may be substituted for craniotomy with advantage. In simple but excessive rigidity of the perinæum nothing can be more unjustifiable than the operation of craniotomy. Surely it is better, in any case, that the perinæum should be torn by the fœtal head, or by the forceps, than that a living child should be killed. Yet it is one of the most common restrictions to the use of the forceps, that they are never to be applied while the perinæum remains rigid and unyielding, lest laceration should occur.

The improvements in plastic surgery, as applied to injuries of the perinæum and recto-vaginal and vesico-vaginal fistulæ, the results of difficult labour, have an important bearing on this subject. These accidents, however deplorable, do not entail the same misery as formerly, and we should certainly not now be justified in performing craniotomy merely to avoid them. In œdema of the vulva, puncture with a needle or a lancet affords relief. Inflammation of the vulva and ostium vaginæ is generally a consequence of patients being allowed to remain too long in labour.

In unavoidable and accidental hæmorrhage, turning or the forceps will deliver as promptly and as safely to the mother as craniotomy. The excuse generally made for craniotomy in such cases is that the os uteri is undilated. But whenever it is possible, after perforation, to draw the emptied head, and the shoulders and trunk of the child, through the os uteri, it must have been practicable to introduce the hand for the purpose of turning, and the process of turning, or the partial separation of the placenta, is more likely than craniotomy to moderate the hæmorrhage.

In hydrocephalus, the method of tapping the hydrocephalic head is as effective as the ruder process of perforation, and does not of necessity destroy the child.

In face cases, if rectification of position by drawing the chin towards the pubis is not sufficient, turning or the forceps are better modes of practice than perforation.

In presentations of the head with the hand or arm, an

early diagnosis is of great importance. Returning the hand above the head, or delivery by the forceps, or turning, ought to render craniotomy unnecessary in such cases.

In disease of the heart and lungs, existing or arising in the pregnant woman to such an extent as to interfere with labour, the induction of premature delivery is called for, and would of course avert any necessity for craniotomy.

In abdominal tumours of the fœtus, impeding delivery, and consisting of collections of fluid in the peritoneal cavity, the pelvis of the kidney, &c., the evacuation of the fluid by puncture is the proper treatment.

In tumours of the vagina and in ovarian, fibroid, or polypoid tumours encroaching upon the vaginal canal, we may avert craniotomy by puncture of the tumours when they contain fluid, by the removal of polypi, or by the induction of labour in cases where puncture is not admissible, and where the tumours are of such large size as to leave little hope of their being flattened out during labour to such an extent as to admit of safe delivery.

In twin cases, the existence of a second child should be made out by the stethoscope, and the forceps or turning ought always to render craniotomy unnecessary.

In distension of the urinary bladder, so as to call for perforation, the matter is so entirely one of neglect or oversight that it can never be pleaded as a justification of craniotomy.

In carcinoma uteri with pregnancy, the induction of premature labour, or incising the rigid os uteri, are preferable to embryotomy.

In the single case of mania, recorded in the table, the methods of force-delivery referred to would have been quite as safe to the mother as craniotomy.

I now proceed to a more careful consideration of the great conservative measures—the use of the forceps, turning, and induced labour—upon the extension and development of which the diminution and abolition of craniotomy must mainly depend.

I. The more general application of the Forceps.

If we regard the saving of human life as the highest object of medical science, the invention of the forceps stands second only in importance to the discovery of vaccination. According to the largest and most accurate statistics which can be adduced, the forceps are used in British, French, and German practice, considered collectively, in about 1 in 176 cases of labour. When we consider that these three countries alone possess a population of more than 100,000,000, we get an idea of the importance of this instrument.

Before the invention of the forceps by Dr. Paul Chamberlen, whenever turning was impracticable, there was no resource in difficult cases but craniotomy. In perforation, the child is necessarily sacrificed, and the risk to the mother is very considerable. As already stated, nearly 1 in 5 of all mothers die after craniotomy, in British practice. On the contrary, the maternal mortality after the use of the forceps is in this country somewhat less than 1 in 20. As regards the child, life is preserved in nearly 75 per cent. of all the cases operated upon by this instrument. From these data we may obtain something like an estimate of the annual saving of maternal and fœtal life which we owe to the use of the forceps. In France and Germany, the collective results of the substitution of the forceps for craniotomy are still more favorable.

It cannot but be considered as remarkable, that in this country, in which the instrument was produced and perfected, the forceps should be less used than among any other people possessing a scientific midwifery. If we examine our standard works, we find that far more pains are taken to show when this instrument ought not to be used, than to demonstrate when and how it may be safely applied. Although more than two centuries have elapsed since the discovery of the forceps, their employment is very limited, and depends, not on fixed principles, but on the impressions of individual practitioners.

Instead of being treated as a blessing, it is too often regarded as a dangerous weapon, the employment of which ought to be fettered and restricted to the utmost possible extent.

In British practice, the forceps are only used in about 1 in 342 cases. In Germany it is employed in about 1 in 159, and in France in about 1 in every 140 cases. Thus it is resorted to more than twice as often by the French and Germans, as by British obstetricians. The reasons why the powers of this instrument have never been fairly brought out amongst us are various. The forceps was unfortunately used as a nostrum when first discovered, and on it becoming publicly known was very freely employed, at a time when obstetric knowledge and education were very imperfect. The results were so disastrous, that the best authorities felt themselves impelled to place the strongest limitations upon its employment. These restrictions have remained to a great degree in force to this day, and have been the cause of mischief quite as great as that which they were intended to prevent. Thus Denman, whose name we all venerate, in his observations on the forceps, despondingly remarked, "If we compare the general good done with instruments, however cautiously used, with the evils arising from their unnecessary and improper use, we might doubt whether it would not have been happy for the world if no instrument of any kind had ever been contrived for, or recommended in, the practice of midwifery." He added, that with a view to the safe application of the forceps, "a practical rule has been formed that the head of a child shall have rested for six hours as low as the perinæum, that is, in a situation which would allow of their application, before the forceps are applied, though the pains should have altogether ceased during that time." William Hunter thought the forceps, upon the whole, had "done more harm than good."

Dr. Robert Lee quotes and approves of the above rule of Denman, as being "well calculated to prevent the rash and unwarrantable use of the forceps." But he admits that there are exceptions, such as rapid exhaustion, or some sudden accident, "in which it would be wrong to comply with

it." But Dr. Lee's own limitations to the use of the forceps are, I submit, far too stringent, and though founded on the desire to prevent mischief, are calculated to produce evils of an opposite and more prevalent kind. It can be demonstrated that, with our present knowledge, greater dangers accrue from the neglect of instrumental interference than from the abuse of these means. Denman laid it down as another rule, that "the use of the forceps can never come into contemplation" until the os uteri is completely dilated. He further held, that "no case is to be esteemed eligible for the use of the forceps until the ear of the child can be distinctly felt." Dr. Lee agrees with Denman on both points. He declares, "I have never met with a case in which the forceps was satisfactorily applied before the os uteri was fully dilated, and the head had descended so low that an ear could be felt." Dr. Collins holds similar opinions. Dr. Meigs, the first authority in America, goes still further in the same direction. He observes, "The forceps cannot be applied unless the parts are favorably disposed; for instance, the os uteri must be dilated and gone up over the head. The vagina and perinæum also must be in such a condition that we need have no fear of lacerating any of their parts, else the operation is contra-indicated. A man shall hardly be justified who inserts his forceps within the os uteri. He must wait until the circle has risen above the parietal protuberance, and can no more be felt." Dr. Meigs considers that "one of the most dangerous errors relative to the forceps that a student could take up would be the opinion that the forceps is, in its very design, a compressive instrument." His opinion is that the head of the fœtus should never be compressed by the forceps so as to lessen its dimensions, and facilitate its descent through the pelvis.

Thus we have in our own day eminent authorities declaring in favour of the following conditions in regard to the use of the forceps:

1. That, in ordinary cases, the head must have rested for some hours on the perinæum, before the instrument is used.

2. That the forceps ought not to be employed unless an ear of the child can be felt.

3. That the forceps must never be introduced until the os uteri is completely dilated.

4. That it is gross malpraxis to introduce the blades of the forceps into the uterus.

4. That the forceps should not be used as a compressor.

On each of these dicta I desire to make a few observations.

It is scarcely necessary to remark upon the first proposition. The evils which result from protracted labours are now so well understood, that few obstetricians could be found who would seriously advocate the barbarous practice of keeping a woman undelivered for several hours after her delivery had become safe and practicable by the forceps. It was never pretended that, after waiting the prescribed time, delivery became more safe or easy. It was simply the mode, and a most erroneous one, in which the advocates of excessive caution and delay met the supporters of the opposite practice.

There is reason to believe that some of the results of protracted labour have been set down to the use of instruments. Nothing is more common than to hear lacerations of the perinæum, and recto-vesical and recto-vaginal fistulæ, referred to the use of the forceps. My late colleague, Mr. Baker Brown, who has had a large experience in cases of this kind, states that such accidents very rarely depend on the use of the forceps, but are the result of pressure in protracted and unassisted labours.

The rule of feeling the ear before applying the forceps rests on two grounds. In the first place, the ear cannot be felt unless the head is comparatively low in the pelvis. Thus, to say that an ear must be felt is little more than another mode of saying that the head must be at the pelvic outlet before we resort to the forceps. This point is now abandoned by a great number of the best obstetricians in this and other countries. The second reason for feeling the ear was that the position of the head might be diagnosed, in order to apply the forceps properly over the sides of the cranium. But the knowledge of the positions of the head, and the cranial and pelvic mechanisms of labour, derived from the

researches of Saxtorph, Solayres de Renhac, Naegele, and others, has rendered this mode of acquiring information obsolete. No student is properly educated in obstetrics who cannot define the position of the fœtal head, and its relations to the pelvis, from an examination of the uterus and fontanelles by the tip of the finger. This can be done, however high the head may be in the pelvis, provided the os uteri is sufficiently dilated to admit the finger. To insist upon feeling the ear before applying the forceps is, then, often an excuse, and an unjustifiable excuse, for ignorance. This rule is also intended to oppose the use of the long forceps, as in cases of arrest or difficulty at the brim in which the long forceps are often applicable, the ear cannot be felt.

The rule that the os uteri must be fully dilated before the forceps can be introduced has a greater show of reason in its favour, but I believe it to be equally untenable. We expect, in every natural labour, that the head or presenting part shall aid in dilating the os uteri, so as to allow delivery to take place. We dilate the os mechanically with the hand when we wish to operate in placenta prævia, or to turn under other circumstances. We do this long before full dilatation has taken place. Those writers who are most emphatic in condemning the use of the forceps with a partially dilated os, give full permission to pass in the hand of the operator when the os is comparatively closed. Dr. Lee, for instance, states in regard to turning in arm cases, that "the hand must not be forced into the uterus if the orifice is rigid and undilatable; it should be dilated nearly to the size of half-a-crown piece or more, or the margin ought to be very thin, soft, and yielding, if it is expanded to a smaller extent than this, when turning is attempted." When treating of placenta prævia, Dr. Lee remarks that, "the operation of turning should be performed in all cases as soon as the orifice of the uterus is so far dilated or dilatable as to allow the hand to be introduced without the employment of much force. It is seldom safe to attempt to deliver by turning before the os uteri is so far dilated that you can easily introduce the points of the four fingers and thumb within it." What I would claim for the forceps is, that

when this instrument is called for, it should be used under nearly the same conditions of the os uteri as those in which turning is permitted. The forceps were aptly compared by Smellie to "a pair of artificial hands," and they have the advantage that each single blade is far smaller than the hand of any accoucheur; while if any one will look at an ordinary forceps, he will find that the bulk of both blades in the greatest diameter when locked, does not exceed that of a closed hand of average size. I have not hesitated in cases of difficulty, when uterine action has ceased, or when impaction has been threatened, and when the os has been sufficiently dilated to admit the blades without injury, to pass them over the head, and to extract gradually and cautiously. I have never met with any accident from this practice, and the fœtus may and does often die while we are waiting for the full dilatation of the os, or the perfect ascent of the anterior lip. In turning, we do not think it improper to use the hand as a wedge for dilating the os, and after bringing down a foot, to use the body and head of the child for the same purpose. Why, then, should we hesitate about introducing the forceps and carefully drawing down the head in similar conditions of the os uteri? The addition caused by the bulk of the blades is inconsiderable, not so much, in fact, as can be compensated for by the most moderate compression of the head.

It must not be thought that I would advise the reckless introduction of the forceps when the os uteri is not fully or sufficiently dilated. But cases occur in which there is only partial opening of the os or in which there is a partial prolapsus of the uterus during labour, so that the whole circumference of the os may be felt in the lower part of the vagina; the anterior lip remains down in front of the head, but the labour is completely arrested. In such conditions as these we must either allow the mother and child to be subjected to the dangers arising from long-protracted labour, or we must craniotomize, or turn, or endeavour to apply the forceps. I believe the use of the forceps, combined with dilatation of the os uteri, to be the plan most likely, under such circumstances, to rescue both lives. Those who oppose the employment

of the forceps in cases of this kind would perforate, and thus sacrifice the child and expose the mother to the risk attending this operation, a risk represented as we have seen by a mortality of 1 case in 5.

Equally untenable is the assertion that it is improper to introduce the forceps into the cavity of the uterus. I maintain that in a considerable number of cases in which the forceps is used, the upper ends of the blades must necessarily enter the lower part of the uterus. When the os is completely dilated, the vagina and the uterus become one smooth canal, without division, and the length of the forceps is such that when the body is at the ostium vaginæ, the tips of the blades generally reach beyond the limits of the vagina. When this is not the case, it is puerile to say that the forceps must never enter the uterus. The instrument, properly managed, does no more harm than the hand of the accoucheur or the head of the child. Beyond the risk of passing the forceps outside the uterus, or of lacerating the os, which with moderate care is very slight, the only way in which mischief can arise is from the compression of the lower part of the uterus, between the external surface of the blades and the sides of the pelvis. But with cautious extraction this is not likely to happen. As the head is slowly drawn down, the os uteri usually slips up. When the anterior lip alone remains down over the head, all we have to do is to avoid drawing the handles towards the pubis. As the head is extracted, the anterior lip invariably ascends.

It is placing a most unreasonable limit upon the usefulness of the forceps, to say that it shall not be used as a compressor. In every tight labour which occurs, the pelvis is a most effective compressor of the child's head. Under the influence of uterine action, a large head is so moulded by the pelvic canal, as to be changed from a spheroid to a cone. The compressive action under such circumstances is very great. In the deformed pelvis it is often so considerable as to impress the shape of the pelvis upon the head of the child, or even to fracture the skull. The difference of shape between a head born after difficult labour in the occipito-posterior position and in the occipito-anterior position is most

marked. The chief grounds upon which Dr. Meigs founds his objections to the compressive action of the forceps are the well-known experiments of Baudelocque. This authority took a number of dead fœtuses, and subjected their crania to compression by the forceps. He found the compressibility very small, and the instruments employed were bent and spoiled before the heads would give way. But it is evident, upon slight reflection, that such experiments are without value. In the dead fœtus, before decomposition has set in, the structures are rigid, the blood has coagulated, and the whole mass is firm and unyielding. It is as different as possible from the soft, living head, in which all the structures are resilient, and the blood perfectly fluid. I believe, in opposition to Dr. Meigs, that gentle but firm and continued compression is one of the most valuable modes of action with the forceps, particularly when any disproportion exists, or when impaction is threatened.

The cases in which the long or short forceps may be used are those of moderate distortion of the pelvis, or disproportion between the pelvis and the fœtal head, whether the difficulty is at the brim, in the cavity, or at the outlet of the pelvis; cases of arrest from failure of uterine action, without any notably morbid condition of the parturient herself; cases of convulsion, in which the os uteri is sufficiently dilated to admit of the introduction of the instrument; cases of occipito-posterior presentation, in which the forceps, or a single blade, may be used to effect the rotation of the head, so as to bring it into the occipito-anterior position, as well as for the purpose of extraction; cases of face presentation, of accidental hæmorrhage, and of rupture of the uterus, without material recession of the head; and to complete delivery in cases of turning. The forceps should also be used at a comparatively early period in many of the cases, which, if not assisted, run on to impaction from tumefaction of the head and swelling of the soft parts of the mother. It should be resorted to in all cases where turning is not indicated, and where the os uteri is sufficiently dilated or dilatable to admit of the introduction of the blades, and where the capacity of the

pelvis allows of their employment, whenever the mother is threatened with danger from unassisted labour, or where the life of the child, as indicated by auscultation of the fœtal heart, is in imminent danger.

The employment of chloroform greatly extends the use of the forceps. Before its introduction it was difficult or impossible to use the instrument in cases of convulsions, or where the patient was excessively timid or violent, or the os externum or vagina unusually sensitive. In such cases perforation has often been resorted to on these grounds alone. Chloroform entirely relieves us from these cases. The application of the forceps is frequently a painless matter, but chloroform should be used in forceps delivery whenever the sensibility is excessive, or any considerable force has to be used. Anæsthesia not only facilitates the use of the forceps under circumstances of difficulty, but it relaxes the vagina and promotes the full dilatation of the os uteri.

Some practitioners rely on the use of ergot, as being to some extent a substitute for, or adjunct to, the forceps. In cases of pure inertia, when the child is low down, the ergot is effective; but from its tendency to cause the child's death, the forceps ought always to be in readiness and applied if delivery does not take place soon after its administration. Some obstetricians give ergot as a means of bringing the head within reach of the forceps, when the head is above the brim. I prefer to use the ergot, as a means of completing abortion when all hope of saving the ovum is abandoned, and of contracting the uterus in post-partum hæmorrhage, to its employment during actual labour.

Finally, I consider that in difficult cases we do not exert all the powers of the forceps, unless we use it in various cases, according to their requirements—as an extractor, as a lever, as a rotator, as a compressor, and, lastly, as an excitor of uterine action. There is scarcely any point in practice admitting of greater improvement, than the more frequent use of this instrument in these several capacities, and I confidently look forward to the experience of the Society, in proof of the positions I have advanced regarding its employment.

II.—The more frequent performance of Turning.

Next to craniotomy, turning is probably the oldest obstetric operation. It was, however, only by gradual steps that what we now understand by version, namely, artificial delivery by the feet, was brought to perfection. The earliest form of the operation was cephalic version, in which the head was brought to the os uteri by manipulating the fœtus, and by placing the mother in positions supposed to be favorable to this manœuvre. For many centuries turning by the feet continued the only great conservative operation by which the mother and child were offered a fair chance of safety in cases of difficulty and danger. We may imagine that this operation was far more highly prized when it stood alone, before the introduction of the forceps and the induction of labour. It was then necessarily resorted to in a great variety of conditions in which the other methods are now adopted. When the hand of the accoucheur was his chief instrument, it was used more freely than at present, and probably turning was never carried to greater perfection than in the times of Daventer, Guillemeau, La Motte, and Mauriceau, immediately preceding the discovery of the forceps. After the revolution produced by this instrument, turning fell into comparative neglect, but from that period to the present its employment has gradually increased in consequence and frequency.

There exists in the obstetric mind a natural dread of turning as of other operations, which is most wholesome if kept within certain limits, but becomes highly injurious when it leads to delay or excessive timidity. As far as we can learn from statistics, the maternal mortality in turning is rather more than 1 in 15, the fœtal loss being rather more than 1 in 3. The danger to the mother does not solely belong to the operation, but must be divided between this and the various conditions for which it may be performed, such as placenta prævia, rupture of the uterus, and other forms of dystocia. I believe the fear which many authorities entertain of introducing the

hand into the uterus may be shown to be unreasonable. Violent manipulations may cause rupture of the uterus, or lead to inflammation, but violence is never required, and never should be used. Carefully managed, the hand of the accoucheur can do no more harm than an equal bulk of the fœtus. The chief danger is lest some miasm should be introduced with the hand, and against this risk we cannot be too careful. The possibility of inoculating the patient with the poison of any disease capable of conversion into puerperal fever is much increased in turning, as compared with the ordinary examinations in labour. On this account great care should be observed with regard to freedom from all sources of contagion by those who turn. The hand and arm of the accoucheur ought never to be introduced into the vagina and uterus without being first washed in some disinfecting liquid, and turning should be avoided by the practitioner who is in attendance upon any severe contagious disease. We do not give turning a fair chance unless we perform it both at the right time and with the greatest care and caution.

It cannot be questioned that a considerable number of the cases in which craniotomy or embryotomy are performed, only become perforation cases, because the proper time for turning has not been seized by the accoucheur. Out of the 1000 cases of lessening the child collected in the foregoing table, 72 were cases in which the arm or shoulder had presented, and in which delivery was accomplished by perforating behind the ear after turning, or by eviscerating the chest, because turning was impossible. The last proceeding was resorted to 56 times. In all these cases, the destruction of the child might probably have been avoided. They were cases in which, from unnecessary delay, the uterus had closed upon the fœtus, and jammed it into the pelvis, so as to render turning impracticable. In the early part of such labours turning is always practicable, and ought to be performed. The necessity for perforating the chest must, in these cases, depend either on a failure of diagnosis or upon improper delay after the presentation had become known. There is nothing intrinsically belonging to them

which demands embryotomy. The child ought invariably to receive the chance of life which turning affords, and the mother to be saved from the greater dangers belonging to embryotomy, as compared with turning. This alone is a considerable field in which turning may and ought to entirely displace craniotomy.

Professor Simpson has revived the practice adopted by Oulde, Pugh, and other old obstetricians, of turning in cases of moderate diminution or distortion of the pelvis. Dr. Simpson demonstrates anatomically that the head of the fœtus passes through a distorted pelvis more easily when the base of the cranium first engages the brim, than when the vault of the head descends first; and that the head may be compressed laterally at the coronal and temporal sutures to a very considerable extent without the destruction of the child. He also shows, by reference to numerous cases scattered among various authors, and by his own experience, that living children may be born in this way, in pelves which otherwise call for craniotomy or the induction of premature labour. These views have now been some years before the profession, and the discussions they have excited, and the recorded cases in which this practice has been followed, furnish a great body of facts in their favour. The principle has been carried too far by some of its advocates, and others have recommended turning in ordinary labours, but this does not affect the value of the method when followed in proper cases. I entertain no doubt that in cases of moderate distortion, where the state of the pelvis is not known until the time of labour, turning may often be resorted to when craniotomy would otherwise be necessary. Cases in which it has been successfully practised in women who had previously been the subject of craniotomy are frequently published. As already mentioned, turning is valuable as a substitute for craniotomy in cases of ruptured uterus and funis presentations, and occasionally in presentations of the face.

Every improvement in the mode of performing this operation demands the most careful attention. The introduction of chloroform is in this respect a great boon. Formerly, many cases were craniotomized because the patient

could not be kept still during the operation of turning. All such difficulties are removed by chloroform. Its influence also promotes dilatation of the vagina and os uteri, and thus facilitates the introduction of the hand. It further weakens the contractile force of the uterus, and renders turning possible in many of the cases of neglected arm presentation, in which the uterus has closed upon the child. In some few cases, it is reported that increased movements of the body, and contractions of the uterus have been caused by its use, but this can only happen where the state of anæsthesia has been imperfectly produced.

The method of "two-finge. turning," recommended by Dr. Robert Lee, is another valuable improvement, which enables us to turn in some cases in which it would be impossible to introduce the whole hand into the uterus. I can speak from experience of the comparative ease with which it may sometimes be performed, when the arm presents, and the shoulder of the child is jammed into the pelvis. In these cases the uterus lies transversely, and with the hand of the accoucheur well in the vagina, a single finger or two fingers commands the greater part of the uterine cavity. The risk of rupturing the uterus is thus considerably diminished in cases where this method is practicable.

As regards the child also, every improvement in the mode of delivery, and in the resuscitation of stillborn children, increases the value and applicability of the operation of turning. The "ready method," the discovery of which solaced the last days of the greatest physiologist of our time, is an important adjunct to the operation of turning.

One reason for the slow advance of obstetric science and practice may be found in the fact, that our systematic treatises on this subject are chiefly the transcripts of courses of lectures delivered to students. It naturally happens that a highly cautious line of practice is enjoined upon young men who are about for the first time to engage in the responsibilities of actual midwifery. This is especially the case in all that relates to operative midwifery. But when works thus produced are issued as standard authorities for

the guidance of mature practitioners, they are often found to be behind, instead of in advance of, the practice of the day, and to act rather as a clog than as a guide or stimulus to improvement. In this way it arises that midwifery owes perhaps more to the hints of men engaged in active practice, than to systematic writers.

III.—The more extended employment of Induced Labour.

This operation stands in more distinct antagonism to craniotomy than any other proceeding in obstetrics, and it is applicable to a great number of cases in which the only alternatives are perforation, or the Cæsarian section. This great improvement in midwifery was introduced upwards of a century ago, but it may be said to be still in its infancy. It would be difficult to find a more striking instance of the tardy onward movement of science, than is presented by the history of this operation. Among foreign accoucheurs, its importance has not until recently been properly recognised; and although in this country its value has long been acknowledged, it has only been carried out in practice to a very limited extent. The numerical proofs of this may be found in all contemporary writers who supply statistical data regarding induced labour and the other operations of midwifery. Dr. Fleetwood Churchill has accumulated a larger mass of midwifery statistics than any other British writer, and to him I am indebted for many of the statistical facts contained in the present paper. Dr. Churchill found that in 622,213 cases of labour, occurring in this and other countries, the forceps were used 3532 times; and that in 510,734 cases of labour, craniotomy was performed 690 times. The highest number given—those relating to the forceps—is scarcely more than the number of cases of labour occurring in a single year in England and Wales. This author also gives the largest number of cases of induced labour which has ever been published. They amount to no more than 524. These cases are spread over all countries and all times during which the operation has

been performed, and of course represent an enormous number of labours, yet the whole number of cases collected in which labour was induced, is less than one third of the cases of craniotomy which may be reasonably presumed to occur in England and Wales in a single year. It is, in fact, smaller than the recorded cases of the Cæsarian operation, of which 790 cases have been collected. If we turn to individual authors, even in this country, where the operation has been performed with the greatest comparative frequency, the results show that the induction of labour, even in proper cases, is the exception rather than the rule. Dr. F. H. Ramsbotham is the only obstetrician publishing large numbers of cases, who has induced labour oftener than he has craniotomized. Dr. Robert Lee, in the second edition of his 'Clinical Midwifery,' gives about 160 cases of delivery by perforation or evisceration, and less than 60 cases of induced labour. The report of the practice of the Dublin Lying-in Hospital, during the mastership of Dr. Johnson, by Drs. Hardy and M'Clintock, contains an account of 60 cases in which craniotomy or embryotomy was performed, and only a solitary case in which the induction of labour was practised. Dr. Collins also reports a single case. The report of the same institution during Dr. Shekleton's mastership, by Drs. Johnston and Sinclair, describes 133 cases of craniotomy, or lessening of the child, and but 6 cases of induced labour. I believe that the most staunch advocates of craniotomy must allow that, with sound practice, these proportions ought to be reversed, and that craniotomy ought, as compared with induced labour, to be in the minority. It can only be by discussion, and the force of professional opinion, that this great reform can ever be effected. Unless a just stigma is attached to the operation of craniotomy, under any circumstance in which induced labour is practicable, the one operation will not supersede the other.

The most frequent cause of the performance of craniotomy is, as we have seen, some disproportion between the pelvis and the fœtal head, arising from different degrees of pelvic deformity. In the table given, 448 cases are referred to this cause, but there can be no doubt that many described as

impaction had the same origin. I contend that all such cases ought to be swept from the lists of craniotomy. No one can maintain that where the pelvis is deformed or distinctly below the natural size, women should be left to go to the full term, in order that the mother may meet the serious risks of craniotomy, and the child suffer its inevitable result. In this country all will allow that in cases of moderate deformity, or diminished capacity, induced labour is the proper treatment as regards both the child and the mother. In high distortion, the great majority will also approve of the induction of abortion in mid-pregnancy. Those who dissent from this will contend, that if gestation goes on to the full term, the Cæsarian section is the proper method of delivery. If they do not consent to the sacrifice of the fœtus in early pregnancy, in cases of high distortion, they will not sanction its enforced death on any account. Under these circumstances how comes it, that such a large number of women are subjected to craniotomy at the full term, with a large, unnecessary sacrifice of fœtal life, and with greatly increased risks to the mother, as compared with those belonging to induced labour? The chief reasons are, that some women decline the induction of premature labour or abortion, and that in the great mass of cases the accoucheur is not aware of the fœto-pelvic disproportion until labour, at the full term, has actually set in, and when there is no alternative save the diminution of the child. But it is not impossible to meet this difficulty, and at all events the attempt ought to be made. I would contend that all pregnant women, in whom there is any suspicion of pelvic distortion or diminution, should be examined in mid-pregnancy, with the view of ascertaining the pelvic capacity. Few cases can occur in which the suspicion will not arise in the mind of a close observer, from the figure and gait of the patient. I believe a pregnant woman could rarely be found who would not, under such circumstances, submit to the necessary examination and treatment. When we reflect that of all women who go into labour in this country, 1 in every 180 die of parturition, it is scarcely too much to say that the accoucheur should know beforehand if his patients are in a healthy physical condition

for the process of childbearing. Such knowledge would enormously increase the power of obstetricians in saving life and diminishing suffering. It is not so much that we are without the means of safety, but that we are not in the habit of applying them. Tumours which do not admit of puncture or removal, and obliteration of the vagina to an extent not remediable by dilatation or incision, stand in the same category as deformity of the pelvis, and require the same line of treatment. Induced labour should also displace craniotomy in cases of want of development, as when very young girls become pregnant, or in women of extremely small size without deformity; in cases of albuminuria in which convulsions occur, or when the vulva and vagina are distended by œdema; and under all other circumstances in which want of space in the hard or soft parts can be seen beforehand to threaten insuperable difficulty at the full term.

It has only been by slow degrees that the operation itself has reached anything like perfection, and this is another reason why it has not been more extensively practised. The old methods of puncturing the membranes with a quill or a stilletted catheter, or giving ergot, were very imperfect compared with the vaginal or uterine douche, or the separation of the membranes by a bougie. Perhaps still more perfect methods may yet be discovered. The ergot frequently failed, and in cases of high distortion, where this measure is most imperatively called for, the induction of labour was often impracticable from the impossibility or danger of reaching the os uteri with the stiletted catheter, but with the douche, wherever we can introduce a gum elastic catheter into the vagina, labour can be brought on. The only advantage of injecting liquid within the uterus is, that it excites uterine action more quickly, but I have never known the injection of water into the vagina, when persisted in, fail of producing the desired effect. As regards the time of performing the operation, it should be resorted to in cases of high distortion, when there is no hope that a living child can be extracted, as early as the fourth or fifth month. If the pelvic capacity renders it possible, the operation should be deferred to the end of the seventh monthly period, or 196 days from the

commencement of the last menstruation, and if possible, still longer. The operation may, in difficult cases, be combined with turning or the use of the forceps. Finally, it may be considered certain, that this operation involves far less risk than any other capital obstetric operation, including the forceps and turning. It is scarcely, if at all, more dangerous than an accidental premature labour. The proportion of children saved by it is very considerable. In considerably more than one half of the cases operated on, the children were born alive.

The following table of cases, collected from British practice, show the causes for which the operation was performed. It will be seen at a glance that, in the great majority, craniotomy must have been performed if this operation had not been resorted to.

TABLE OF 300 CASES OF INDUCED LABOUR IN BRITISH PRACTICE.

Pelvic distortion	273
Excessive vomiting in pregnancy	7
Albuminuria	4
Death of children in previous pregnancies from disease of the placenta	3
Ovarian tumours	3
Dropsy of the amnion	1
Small stature of the mother, without deformity	1
Deficient development of the soft parts in a girl of fourteen	1
Mania	1
Disease of the bladder	1
Disease of the heart	1
Disease of the liver and general dropsy	1
Rupture of the uterus in a previous labour	1
Cancer of the thigh	1
Cancer of the rectum	1
	300

Although I would contend for the abolition of craniotomy in the case of living children, as the rule of practice, believing firmly that it may always be avoided if we properly develope the whole of the resources at our command, I am not so Utopian as to expect that cases will not occasionally be met with in practice, in which perforation of the living child will not only be necessary, but a positive duty. Cases will occur of deformity overlooked, of impaction from delay and swelling of the soft parts, of malpositions and malpresentations unrectified, and other forms of dystocia, in which such a point of difficulty has been reached that either the mother or the child must be sacrificed. Under such circumstances, it would be the bounden duty of the accoucheur to craniotomize rather than allow the mother to perish.

But I believe that such deplorable contingencies need never occur, and that cases of this kind, when they do happen, ought to be considered as depending on some error or neglect, and to be held only as exceptions to right practice. Nothing will tend so much to diminish or prevent such cases, as the establishment of the non-necessity of craniotomy as the rule of practice. Considering the various means at our disposal in the way of preventing the necessity for craniotomy, I do not hesitate to express my strong conviction that, as the rule, craniotomy in the case of the living and viable child should be abolished, and that if all the resources of obstetrics, in the way of prevention, management, and alternative treatment, were properly wielded, the necessity for the operation would never occur. There is no department of medicine in which, looking to what has been already done, there is more reason to be proud and hopeful for the future, than obstetrics. The average deaths from childbirth in London, during the ten years between 1660 and 1670, as nearly as could be ascertained by Dr. Merriman from the Bills of Mortality, was 1 in 39. At the present time, the average of deaths from childbirth and puerperal disease in the metropolis, is rather less than 1 in 200; so that two centuries ago, more than 5

women were lost in childbed where 1 now perishes. But even the loss of 1 in every 200 cases of parturition, though somewhat more favorable than the general childbirth average of 1 in 180, is very high. Looking to the results obtained by the most successful practitioners, there are good grounds for expecting that the deaths from childbirth may ultimately be reduced to less than 1 in 1000. No class of cases admits of improved management to a greater extent than instrumental labours, and of these craniotomy cases are by far the most fatal. If the facts and arguments contained in the preceding pages are of any value, the diminution or abolition of craniotomy must greatly diminish the loss of maternal, as well as of fœtal life. Rightly considered, the interests of the mother and child rarely, if ever, come into collision. Neither fœticide nor matricide need be entertained by the accoucheur. With the one exception of high pelvic deformity, it may be laid down as a moral axiom in obstetrics, that the treatment which most certainly assures the safety of the child, is also the safest for the mother.

CASE

OF

TWINS,

ONE BLIGHTED, THE OTHER ANENCEPHALOUS.

BY

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Read March 3rd, 1859.

A. G—, æt. 22, a primipara, was taken in labour, Jan. 11th, 1859. Presentation, footling. The child, a male, was born alive in about eight hours after the commencement of labour. On examination, it was found to be anencephalous. The arch of the cranium was wanting, the base of the skull only being present. What was present of the frontal bone was entirely horizontal, the two parietal bones were also flattened downwards, their posterior borders forming, with the occipital bone which projected almost horizontally backwards, a sharp angle. The measurements of the head were as follows: from ear to ear round the orbital ridge, $5\frac{3}{4}$ inches; from the same points over the top of the head, $4\frac{3}{4}$ inches; and round the posterior angle above mentioned, $7\frac{3}{4}$ inches; the entire circumference, $13\frac{1}{2}$ inches. The bones seemed normally ossified. There was no indication whatever of any anus or rectum, no bulging or fluctuation could be felt in this region. Both feet were affected with talipes varus. The left femur was fractured, or at least separated in two parts, at about its middle; and both femurs were immovable at the hip-joint. As far as one could see, the rest of the body seemed tolerably well formed,

and the child then appeared healthy, though it was of a slightly yellow tinge. It was able to swallow liquids, but vomiting soon came on, and it died two days after birth. Its genital organs were perfect, and it voided urine once or twice before death. No post-mortem examination was permitted.

Half an hour after the birth of the above, the placenta was expelled; and with it a second fœtus, blighted, apparently, at about the fifth month, no separate placenta belonging to it could be found, and it was not attached to the first. Its tissues, though not at all decomposed, were soft and disintegrated, hanging everywhere in a shreddy state. There was unmistakeable evidence of its having undergone long continued pressure. It was generally much flattened, the chest and cranium completely so from side to side, and in that condition they remain. As far as can be discovered, there is no malformation.

CASE

OF

MEMBRANOUS CROUP.

BY

R. UVEDALE WEST, M.D., Alford, Lincolnshire.

Read March 3rd, 1859.

On the 1st of December, 1848, late in the evening, I was called four miles in the country to see the little daughter of a farmer. The child was a little over eight years of age. I found her suffering with the peculiar wheezing respiration of advanced croup, with blueness of lips, and great distress of countenance. I thought the case hopeless, but sent her a mixture containing tartarized antimony, ipecacuanha wine, and syrup of squills, with directions for a dose to be taken frequently, until free vomiting was excited. I sent also a small blister for the throat.

I called again the next morning, fully expecting to find my patient dead. To my surprise, she was lying on a sofa, breathing quite easily. I immediately asked if anything had been thrown up; when, to my great gratification, I was shown, in a washhand-basin, a large quantity of shreds of membrane, mucus, &c., from among which I picked out the specimen shown, which is undoubtedly a *cast of the trachea.* It is three inches in length, indented throughout by the rings of the trachea, and the tube is perfect in two places, in one to the length of half an inch, in the other by a thread of membrane passing across. My little patient recovered rapidly, without any return of croupal coughs or wheezing,

although she continued voiceless for about six months. Probably the blister was useful in removing, by counter-irritation, the inflamed condition of the tracheal mucous membrane.

The salient points, in this case, are, perhaps, the age of the child, and the extent of pseudo-membranous exudation removed in the act of vomiting. There can be no question but the child's life was in the most imminent danger. The specimen, indeed, in that portion of it, where the tube is perfect, shows how nearly the trachea was closed up. The case, too, shows the value of emetics, even in that stage of croup in which the false membrane is extensively formed; of their value in incipient croup, there can be no doubt. And, from my experience of this and other cases of pseudo-membranous croup, which I have seen recover, I would say decidedly that we need not hesitate to give *antimonial* emetics.

ON A NEW

METHOD OF EXAMINATION OF THE TUMOUR

IN CASES OF SUSPECTED

CYSTIC DISEASE OF THE OVARY;

WITH THE DESCRIPTION OF AN INSTRUMENT
FOR EFFECTING THE SAME.

BY

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Read March 3rd, 1859.

An accurate diagnosis of the nature of suspected ovarian cystic tumours has always been attended with a considerable amount of difficulty. It is, indeed, one of the chief arguments used by the opponents of radical operations for the relief of patients supposed to be suffering under ovarian cystic disease, that, until the operation has been commenced, there is always a want of certainty in the diagnosis; and that it is quite within the limits of possibility, that, after the operation has been commenced, it may be found that a serious mistake has been committed, and the life of the patient thus seriously and unwarrantably endangered before the real nature of the case is revealed. The records of the various operations undertaken at different times for the removal of supposed ovarian tumours, show that in a certain number of cases, after the abdominal section had been made, no tumour of any kind was discoverable. Thus, in 300 cases of operation collected by Lyman, the particulars of which are quoted in the 'British and Foreign Medical and Chirurgical Review,' for April, 1857, no tumour was found in nearly 3 per cent. of the whole, and in more than 10 per cent. of the cases, important errors in diagnosis are said to have been committed. Of 30 operations undertaken

by Dr. Atlee, in eight cases the tumour was found to arise from the uterus, and not from the ovaries. In the last edition of Kiwisch's 'Klinische Vorträge,' edited by Scanzoni, are collected 138 cases of operation; in fourteen of which mistakes in diagnosis occurred, and in five of which no tumour whatever was to be found.

The evidence of various collectors of operations of the kind here alluded to, then goes to prove that not unfrequently serious errors in diagnosis have been committed, and operations unnecessarily undertaken. In cases of operation recorded within the last few years, it would appear that the mistakes committed in diagnosis have been less frequently of a serious character,—a fact probably due to the circumstance that more attention has been paid to the subject of ovarian disease, and that more is known of its pathology and symptoms than was the case many years ago. Improved as our diagnostic acumen in such cases may be presumed to have become, we are yet, however, far from having arrived at perfection. The abdomen is not so often opened and no tumour discovered, as was formerly the case, but the operation is still frequently commenced with ideas respecting the nature of the tumour, which are not confirmed by an examination of the same after the operation has been completed. It is not to be denied that experienced observers are, as a rule, able, after thorough examination of the abdomen and the generative organs by the means hitherto available, to pronounce an opinion as to the nature of the tumour not far from the truth; but it must, at the same time, be recollected that exceptions to this rule are by no means wanting.

There are many questions which the physician or surgeon who is called upon to administer relief in cases of presumed ovarian cystic disease, anxiously puts to himself while making the preliminary examination of the tumour through the abdominal wall or otherwise—questions which it is highly important to answer satisfactorily, inasmuch as the decision as to the particular method of treatment to be adopted is based upon the conclusion then made. Thus, a case of

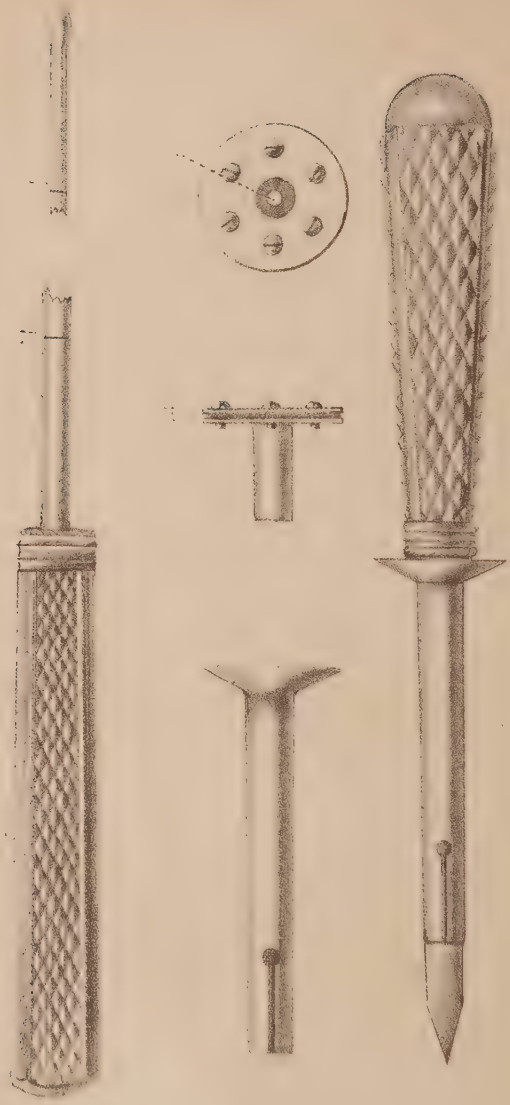
considerable enlargement of the abdomen may come before us, in which the shape of the abdomen, the nature of the visceral displacement as ascertained by percussion, the general symptoms and previous history of the patient render it tolerably evident that a tumour connected with the ovaries is present. Examination per vaginam and per rectum may have confirmed this view of the case. But, having ascertained so much, it is extremely desirable that we should be able to proceed a step or two further, and determine, not only that an ovarian tumour is present, but the exact nature of the same, and the presence or absence of complications. These several points are important, in considering whether the case is one in which ovariotomy may be contemplated, or injection simply; whether the nature of the case is such as to allow only of paracentesis, or whether it is one in which operative measures are not justifiable. In order that these questions may be dispassionately weighed and considered, it is essential that the diagnosis be made as perfect as possible, and any new method of exploration, whereby the diagnosis may be assisted, is certainly worthy of attention.

The object of the present communication is to bring before the Society a method of examination in cases of suspected ovarian cystic disease, which has not, so far as I am acquainted, been yet made use of, and the application of which is unattended with any considerable inconvenience to the patient. The cases to which this new method of exploration is applicable, are those in which the abdomen is considerably enlarged, and in which other diagnostic means have enabled the observer to arrive at the conclusion that a large fluctuating tumour is present in the abdomen, probably connected with the ovaries—possibly, also, in some other cases of ovarian tumour, in which the fluctuation is less evident.

I propose, by means of an instrument adapted for the purpose, and which may be conveniently termed the "ovarian sound," to probe the interior of the cavity in which the fluid is contained, and to obtain

thus information of an important character in relation thereto. The instrument (a representation of which is subjoined) contrived for the purpose of this internal exploration, consists of an ordinary canula and trochar, and a secondary canula fitting accurately within the other: the latter is provided with an india-rubber diaphragm, having a small perforation in its centre, through which the sound passes. The sound is a slender rod, composed of the same metal as the ordinary uterine sound, and therefore flexible, graduated in inches, and fourteen inches long. It is provided with a smoothly rounded extremity, and is fixed in a handle of convenient size. The instrument is used in the following manner:—the trochar and larger canula are thrust through the abdominal wall, at a convenient position, the trochar withdrawn and the secondary canula inserted within the other. The sound is next to be introduced through the canula, a few drops only of the contents of the cyst or other cavity being allowed to escape after the trochar is withdrawn, and before the sound is introduced. After the introduction of the sound no more fluid escapes, the sound being so completely embraced by the india-rubber diaphragm as to prevent it. The operator is now in a position minutely, leisurely, and conveniently, to examine by means of the sound the whole of the interior of the cavity thus explored, with the advantage that the contents of the cavity do not escape. The sound can be introduced to any depth which may be necessary; it may be withdrawn, partially bent, and reintroduced with the greatest facility.

It is very evident, that in this manner the size and relations of the cavity examined by the sound can be accurately ascertained, and it will be at once apparent whether or not the tumour is composed of a single large cyst. Combined with examination externally and per vaginam, the use of the sound enables us to form correct conclusions as to the precise position and relations of the abdominal tumour. In a case of ascites erroneously suspected to be one of ovarian cystic disease, the sound would be an infallible means



of detecting the error, and possibly of preventing disastrous results to the patient. In cases of ovarian cystic disease, combined with ascites, the nature of the case would, by the use of the sound, be made at once obvious. Many other interesting points which will readily suggest themselves to my hearers, and highly important in reference to the plan of treatment to be proposed, might thus be made out.

The time will doubtless arrive when it will be possible to separate the cases of ovarian disease which come before us into several classes, to each of which a peculiar method of treatment will be applicable. I venture to express the hope that the method of examination of suspected tumours of this kind now detailed, may be found useful in promoting our progress in this direction.

Before concluding, I may mention that the instrument now described was used very recently in a case of single large ovarian cyst, the subject of which was a woman aged fifty, under the care of Mr. Spencer Wells. The results afforded by its use on that occasion were such as abundantly to justify the anticipations above expressed as to its utility. In the instance in which the instrument was used, the contents of the cyst were allowed afterwards to escape. In most cases it will probably be considered necessary to allow a certain portion, if not the whole of the contents of the cyst to escape when the tumour has been explored, in order to prevent the effusion of these contents into the peritoneal cavity.

DESCRIPTION OF PLATE.

A, the sound. B, the smaller canula, provided with an india-rubber diaphragm, perforated in the centre (*b*), to be used with the sound alone. C, larger canula, to be used with the trochar only, as shown at C D.

ON

TRANSFUSION OF BLOOD,

ITS HISTORY, AND APPLICATION IN CASES OF SEVERE HÆMORRHAGE.

BY

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Read March 3rd, 1859.

ALTHOUGH the subject of transfusion of blood is a theme upon which little can be said which is not already known, yet as the subject is one fraught with interest, and has occupied much of the author's thought and attention, he has much pleasure in complying with a suggestion made to him of bringing it before the Society.

It is quite unnecessary to premise that "transfusion" literally signifies the pouring out of one vessel into another, and that "transfusion of blood" means the introduction of the blood of one living animal into the vascular system of another. The idea that this operation might be performed with success for the cure of certain diseased conditions of the body is of ancient date, and during the prevalence of the opinion that all diseases arose from a depraved condition of the fluids (the blood being the principal), the supposition was by no means unnatural that, if this vitiated blood could be removed, and the vessels replenished with that which was pure and healthy, all discomfort would be relieved, and the individual restored to health and strength. But, beyond this, an absurd notion was entertained, that an altered state of the blood was not only the cause of disease, but of that decay which is the natural consequence of old age; and hence it was inferred that if the *old* blood could

be withdrawn, and *young* blood introduced in its stead, not only might health be preserved, but life prolonged to an indefinite period: intimations of this notion are found in the fabulous stories of antiquity—the sorceress Medea is described by Ovid, in the seventh book of the 'Metamorphoses,' as having the power of restoring youth and vigour to those whose bodily frames were sinking under the infirmities of old age; she is represented as accomplishing her object in two ways: First, by injecting the juice of certain magical herbs into the veins; and, secondly, by the use of youthful blood. In both cases the blood was considered the "fons et origo mali," and must therefore be taken away to make room for a more pure and healthy fluid. Her performance on Æson, the father of Jason, is an example of the first, and is thus described:—

"Stricto Medea recludit
Ense senis jugulum, veteremque exire cruorem
Passa replet succis."

After describing the wonderful effects produced, *e. g.* the disappearance of the various existing signs of old age, the story concludes thus:

"Æson miratur et olim
Ante quater denos hunc se reminiscitur annos."

In the second instance, Medea is said not to have performed her promise, the whole transaction being one of treachery and deceit; her directions, however, to the daughters of Pelias, who had applied to her to restore their father to youth, have so distinct a reference to transfusion of blood, that the author makes no apology for transcribing it:

"Stringite ait gladios, veteremque haurite cruorem
Ut repleam vacuas juvenili sanguine venas."

It is interesting to compare the above quotation with another from a little work by Libavius, published in 1615, entitled 'Appendix Syntag. Arcan. Chymic.' In chapter iv, the following operation is thus described: "Adsit juvenis robustus sanus, sanguine spirituoso plenus: adstet exhaustus viribus, tenuis, macilentus vix animam trahens. Magister artis habeat tubulos argenteos inter se congruentes: aperiat

arteriam robusti et tubulum inserat, muniatque: mox et ægroti arteriam findat et tubulum fœmineum infigat, jam duos tubulos sibi mutuo applicet, et ex sano sanguis calens et spirituosus saliet in ægrotum, unaque fontem vitæ afferet omnemque languorem pellet."

It it quite clear that the operation as thus described never could have been performed; the vessels directed to be opened were the arteries, and at a period when suppression of hæmorrhage by ligature was unknown; in truth, the author mentions the subject in the way of satire, and not of serious recommendation. We may therefore conclude that at this early period transfusion had never been attempted. For about half a century after the writings of Libavius no notice was taken of transfusion. Between the years 1660 and 1670, the subject was renewed, and experiments actually performed, simultaneously, as it would seem, by Lower in our own country (the author of 'Tractatus de Corde'), and by Denys in France, and a controversy arose between these two gentlemen, each claiming for himself the merit of bringing the operation forward in a more tangible form, and with a view to a more practical result. Various papers were published at the time in the 'Philosophical Transactions,' from which it would appear that both were really entitled to the honour they respectively claimed, inasmuch as each was at the same time investigating the subject without being aware that the other was engaged in a similar undertaking. There can be little doubt that Denys was the first who ventured to operate on the human subject; it is stated, however, that Lower wrote a letter to his friend, R. Boyle, bearing date July 6, 1666, in which he describes the results of his experiments on animals, and expresses an opinion that transfusion might be made available for the removal of many diseases to which man is subject. After this letter was written, but before its contents were made known, Denys had operated, and hence the dispute arose. The editor of the 'Philosophical Transactions' observes: "Before we dismiss the subject, something is to be said of the cause why the curious in England make a demur in

practising the experiment on man; the above ingenious M. Denys has acquainted the world how this degree was ventured upon at Paris, and with what good success it there met; and the 'Journal des Scavans' glorieth that the French have advanced the operation so far as to try it on man, and that with good success. We readily grant they were the first we know of that actually improved the experiment, but then they must give us leave to inform them of this truth; that the philosophers of England had long ago practised it upon man, if they had not been so tender in hazarding the life of man," &c., &c.

The operation of transfusion was not much advanced by the experiments of Denys. Five cases only are related, and the following results recorded: two are said to have recovered, two died, and one who was in good health was in no way affected by the operation. The first was that of a man who had been suffering for two years with intermittent fever; every known remedy had been had recourse to without effect, the blood of a calf was injected into his veins, and, according to Bartholini, "Quasi Medeæ arte recoctus, revivixit et melius habuit, quamvis non plane in integrum restitutus ('Acta Thomæ Bartholini'). The following cases are extracted from the 'Philosophical Transactions:' "A man was labouring under fever, for which he had been bled twenty times, and was left in a state of lethargy: from this he was aroused, and, it is said, cured by the injection of a quantity of blood taken from a lamb."

The next case occurred in the person of Baron Bond, the son of a Swedish minister; four physicians were in attendance, who "bled, purged, and blistered him as much as they thought fit: he grew at last so weak that he was unable to stir, lost his speech and senses, and vomited all he took." The patient appearing to be in articulo mortis, transfusion was employed as a last resource; the effect is thus described: "he revived in a most extraordinary manner, spoke to those around him, the vomiting ceased, and he took nourishment." By the next morning he had relapsed again, the operation was repeated, and in the evening he died. A

post-mortem examination discovered a gangrenous condition of the bowels. Another case which has been reported as unsuccessful was that of a madman, who was but little affected by the operation, his death, which occurred some time afterwards, was unquestionably produced by poison, administered by his wife, as was proved by an investigation of the facts in a court of justice. Dr. Lower and Dr. Edmund King are said to have performed the operation with success; the blood of a lamb was used in this instance.

The precise mode of operating was not generally known. Paulus Manfredus, in his work, 'De Novâ et inauditâ Medico-Chirurgicâ operatione sanguinem transfundente de individuo ad individuum,' expresses his astonishment at this secrecy, and describes the method employed at Rome. There is a curious plate in the 'Armamentarium Chirurgiæ Joannis Sculteti,' published in 1693, wherein the surgeon is delineated in the very act of performing transfusion. The patient is sitting upon a chair, and being bled in the ordinary manner, from the left arm—whilst the system is replenished by the introduction of the blood of a sheep in the following manner: a long tube, composed of the dried intestines of a duck, and tipped with silver at each extremity, in order to facilitate its introduction, is represented as extending from the carotid artery of the sheep to the median vein of the man's right arm, and through this tube the blood is supposed to be flowing. Heister, who wrote in the year 1739, 'De Chirurgiâ Infusoria et Transfusoria,' gives the following doleful catalogue of the effects produced by the system. "Hominum enim illud medicinæ genus expertorum plerique fere in stupiditatem fatuitatem, delirationem aut melancholiam prolapsi feruntur: vel etiam accelerata morte ex viventium numero abrepti." He goes on to state that the consequences being so deplorable, "*prout rumor est,*" (for he does not mention it on his own authority), "Quin Gallici etiam senatus sive Parliamenti edicto publico, Parisiis damnata sit ac prescripta." Certain opposers of transfusion have asserted, on the authority of Heister, that the operation had been repeatedly performed in France,

not only with brute, but with human blood also; and that, in consequence of the dangerous results above referred to, it was prohibited by a decree of the French Parliament. Now, it is quite evident that Heister was not practically acquainted with the subject, nor had he formed any definite opinion of his own; he closes his remarks thus: "Vel ut pro lacte calido, jusculo, hominum etiam animalium sanorum sanguine post factam profusionem sanguinem nimium injiciendis: aliisque in morbis usurpanda, id meo quidem judicio, manifestioribus experimentis definiendum adhuc restat." He names several diseases in which it was probable that relief might be obtained by the operation, and refers to a surgical work by Purmannus, in which the author states that he has successfully employed it in several diseases. It should also be borne in mind that Heister's observations were concerning the "Chirurgia Infusoria" generally, of which system transfusion of blood was considered as forming a part. In no instance, however, was human blood employed. G. A. Mercklinus, who writes in 1769, "De ortu et occasu transfusionis sanguinis," argues against the use of brute blood, and relates a case in which it was tried on a consumptive patient at Rome, who died shortly afterwards; although he supposes the probability of success would be greater if human blood were employed, he still hesitates in recommending it, because it had never been tried; his own words are conclusive on this point, they are these: "tamen pro indubitato et infallibili præsidio, experimentorum certitudine destitutus, præfracte jactitare nondum audeo." The assertion that the operation had been totally prohibited in France is not correct; it is quite true that its indiscriminate use by any medical man on his own responsibility was proscribed; it was only to be attempted with the express sanction of the Faculty of Paris. This edict Bartholini ascribes to jealousy and envy: "Quia primus D. Denys qui tentaverat, non erat ejusdem ordinis sive non erat in Facultate Medica Parisiensi."

It is needless to state, that the hopes which had been from time to time entertained regarding the benefits to be

derived from transfusion were utterly and totally disappointed; and if the object for which it was instituted, and the means employed in its practice be considered, no one will be surprised at the result; its object was the removal of disease, the means used the injection of brute blood. In many cases, organic lesions had occurred to such an extent as to render recovery impossible. The operation, therefore, was false in theory and dangerous in practice.

At a later period attention was again directed to the subject by Dr. Harwood, who was in after years professor of anatomy at Cambridge: in the year 1785 his thesis on "Transfusion of Blood" was published; abandoning the idea of curing diseases, he performs his experiments with a view of ascertaining whether the operation might be employed with advantage in cases of dangerous hæmorrhage. He answers the question affirmatively, and refers to numerous experiments on dogs in confirmation of his opinion. He observes: "From all the numerous experiments which have been lately made on this subject, one important fact seems to be clearly established, that the blood of an herbivorous animal may be safely substituted for that of a carnivorous, and *vice versâ*, without danger, or even inconvenience to the animal who receives it. In cases, therefore, of such copious evacuations of blood as to threaten the death of the patient, would not transfusion be expedient? and if death should be inevitable without it, does it not become a duty to make the trial?"

During the present century, Dr. Blundell repeated the experiments of Professor Harwood on a somewhat extensive scale, having the same object in view, viz., the recovery of animals apparently dying from hæmorrhage; the result, as published by him in a volume entitled 'Researches Physiological and Pathological,' which made its appearance in 1824, were highly satisfactory. He differs in one respect very materially from Dr. Harwood, who supposed that the blood of a carnivorous animal might be substituted for an herbivorous, and *vice versâ;* he considers it an essential element of success that the blood employed should be

taken from an animal of the same species as that into whose veins it is about to be injected; and consequently that in operating upon the human subject, human blood should be employed. Like Professor Harwood, Dr. Blundell experimented on a number of dogs; in several instances he injected human blood into the canine vein, and although the animal revived from the immediate effect of the stimulus, it soon afterwards sickened and died. This fact had been demonstrated by Dr. Leacock, who published his Inaugural Thesis at Edinburgh a few years previously, and from whose experiments it was proved that, although a *small* quantity of blood from a different species of animal might be used without any decidedly injurious effect (although in almost every case attended with unpleasant symptoms) yet that in cases of extreme exhaustion from hæmorrhage where it was necessary to inject a larger quantity, the success of the operation was defeated if the blood of one species of animal were substituted for that of another.

Dr. Blundell, Mr. Doubleday, and the author, instituted another set of experiments, making use of another species of animal, namely, the horse; here also the result was most decisive. In no instance where the operation had been properly performed was there failure; the revivification was immediate and permanent. The order of experiment was the following: in the first place, a horse was suffered to die from bleeding, that the symptoms immediately preceding dissolution might be carefully noticed; this was done that transfusion might not be performed in after experiments, before the manifestation of those signs which indicate immediate death. The apparatus employed was very simple, consisting of a long elastic tube, furnished with a stop-cock at either end, for the purpose of regulating the supply of blood; one end of this tube was inserted into the carotid artery of the horse which was to supply the blood, the other end into the jugular vein of the animal into whose system the blood was to be received; the communication between the vessels being continuous, the blood was not at all exposed to the atmosphere. The animal was then bled

from the carotid artery, the blood being allowed to flow until the death struggles supervened; the stop-cocks were then turned, and when a certain quantity of blood had passed from the carotid artery of the one into the jugular vein of the other, the struggles ceased; in a few seconds the horse was able to get upon its legs, and the apparatus being removed, walked away and readily partook of nourishment.

It was impossible to ascertain the precise quantity of blood transfused; it was, however, small in comparison with that which had been removed; this fact was proved by the very slight effect produced upon the supplying animal; this was a point of great importance—as, had the result been otherwise, the operation as regards the human subject would, in all probability, never have been performed, in consequence of the difficulty, if not impossibility, of procuring the necessary supply. In these experiments arterial blood was used, in consequence of the greater facility with which it could be procured. In a few instances, Dr. Blundell made use of venous blood in his previous operations on the dog, with similarly beneficial results. The author is inclined to believe that, even if there were no impediment in the way of obtaining human arterial blood, venous would be preferable, as being the more natural stimulus to the right side of the heart. But will blood thus injected really nourish the system; or does it, as some have supposed, merely act as a temporary excitement? To settle this question, Dr. Blundell kept a dog alive for three weeks without food, a few ounces of blood being injected daily into the jugular vein.

Hence it was satisfactorily proved that, in the inferior animals, transfusion of blood might be used, not only without danger, but with perfect success; and it was reasonable to suppose that human blood, injected into human veins, would also be made subservient to the purposes of the human circulation.

Dr. Blundell relates six cases in which the operation was performed on the human subject; and, although unsuccessfully as regards the preservation of life, the attempts de-

monstrated the fact that transfusion was neither difficult or dangerous.

Of all cases of hæmorrhage, none seemed more favorable for a trial of this operation, than those which occur during the puerperal state, and which from their severity are termed "floodings." The outburst is sudden and profuse, the symptoms alarming, and often dangerous in the extreme. It is true, that in a large majority of instances, the bleeding may be arrested before the development of the more formidable symptoms, if proper means be promptly and vigorously had recourse to; it is equally true that there are cases of an opposite character, where there is no decisive rally, although the uterus is so firmly contracted as to prevent any further loss. The patient becomes more and more faint, each attack of syncope more alarming than its predecessor; the extremities *first*, the general surface of the body *afterwards*, becomes cold, the respiration deep, laboured, and hurried; the pulse at the wrist scarcely, if at all, perceptible, the heart itself feebly fluttering; add to these, restlessness and convulsive jactitation, and the catalogue of symptoms will convince the most inexperienced observer that death is imminent. The difficulty may be increased by vomiting, the stomach rejecting all nourishment and stimuli, and hence this, the usual source of supply, is effectually cut off.

Let it be remembered that there is no organic disease to contend with, the danger arises solely from loss of blood; if, therefore, the quantity of the circulating fluid could be safely increased by the injection of pure blood into the vessels, it was reasonable to infer that recovery would take place: at all events, the facts previously related were sufficiently encouraging to justify the attempt in cases deemed hopeless under ordinary methods of treatment. The expectation has been fully realised, not only in cases of puerperal floodings, but in severe hæmorrhage, the result of accident.

As the successful examples of transfusion bear so marked a resemblance to each other, the time of the society will not be occupied by the detail of many cases; one only will be related—

A lady of delicate habit, thirty years of age, was confined with her tenth child; she had been the subject of hæmorrhage after every labour. It was at this time renewed with increased severity, and attended with symptoms indicating the most urgent danger. Her medical attendant, (an accoucheur of long standing and of great repute), requested the assistance of the author. The patient was found in the following condition: She was lying on her back, with the most perfect death-like countenance, the extremities were of a marble coldness, the general surface of the body also cold; respiration excessively laborious; the eyelids closed, the eyes insensible to light; the jaw dropped; no pulsation could be felt in the radial or carotid arteries; the breathing was the only indication of life. Stimuli had been exhibited, but with no lasting benefit. Transfusion afforded the only chance of saving this patient's life; it was consequently performed without delay. The first injection of two ounces of blood produced no other effect than that of rendering the beat of the artery discernible; the second was followed by decided improvement. After eight ounces of blood had been introduced, this lady was sufficiently revived to recognise her medical attendant. She evidently felt uneasiness over the region of the heart, and placed his hand upon the left side of her chest; no irregular action was discovered on a careful examination. Two or three teaspoonfuls of brandy were given during the operation, and nothing else. The patient suffered from headache, and had occasional hysteric paroxysms, to which she had been long subject. There was no other unfavorable symptom.

The mode of performing the operation is now so well known, that it will be unnecessary minutely to describe it. Three things are necessary to be observed—

First, that great care be taken to get rid of any air that may be contained in the syringe; secondly, to introduce the blood very slowly, experiments having proved that a sudden and large supply overwhelms the action of the heart, and causes immediate death; thirdly, to wait a few minutes between each injection.

The syringe used by the author is lined with tin, and is capable of containing two ounces of fluid; it is furnished with a long tubule for the convenient insertion into the vein; a funnel communicates with the barrel of the syringe, through which the blood passes without being received into an intermediate vessel.

It is seldom, if ever, necessary to inject a large quantity of blood: it is better to discontinue the operation as soon as the rally is decisive, and there is no returning collapse. In one case attended by the author, four ounces only were sufficient to produce this effect. Many persons doubted whether this small quantity could be of real service in a case of collapse otherwise fatal. In forming an opinion it should be remembered, that the intention of the operation is not to restore the vascular system to the condition which existed before the irruption of the blood; it is well known that the heart and vessels can accommodate themselves to a greatly diminished supply. There is a point, however, at which the circulation ceases. Might not the fatal event be prevented by the injection even of a very small quantity of healthy and pure blood, the heart being thus enabled to continue its contractions until the system was recruited by the usual process of digestion and sanguification? An example will illustrate the author's meaning. A patient is bled from the arm; after a certain quantity of blood has been lost, he *feels faint;* if the compress be now applied, and the bleeding stopped, he recovers; but if three or four ounces of blood be allowed to flow before the arm be tied up, after the symptoms of faintness have shown themselves, he swoons. Now, if four ounces of blood *lost*, make all the difference between an approach to, and actual deliquium, may not the same quantity *gained* make the difference between remediable and irremediable syncope?

As a general rule, from eight to twelve ounces may be safely transfused.

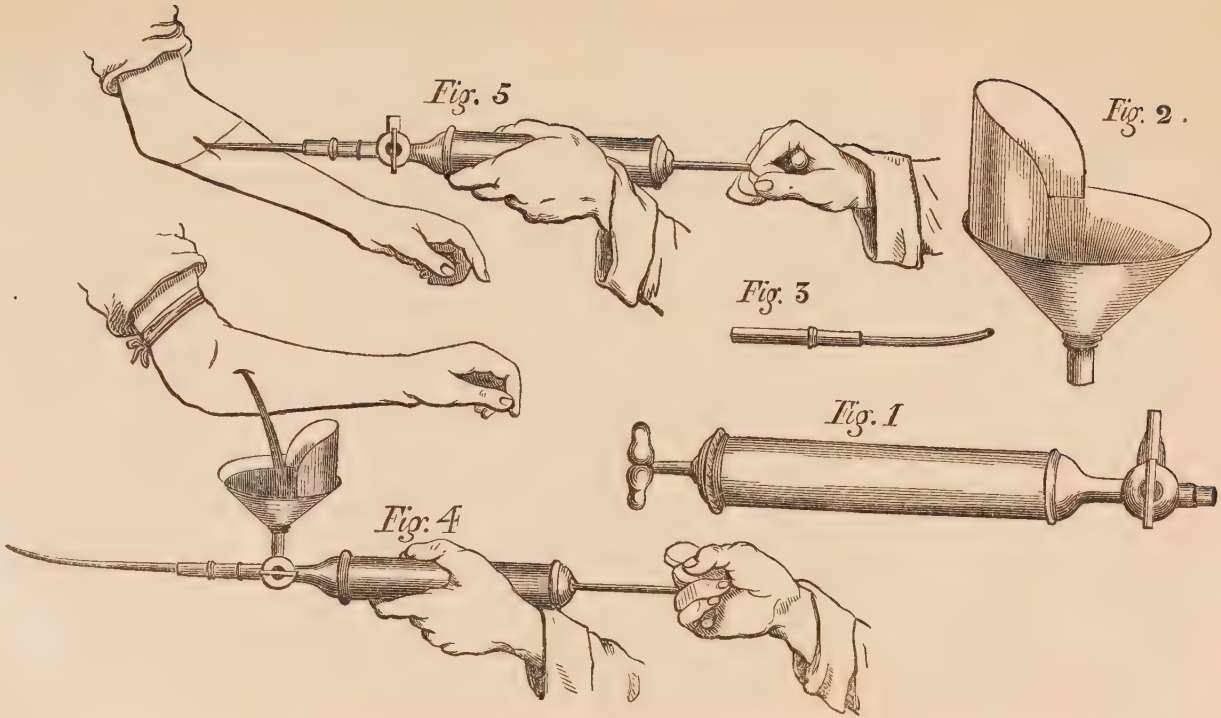
Fig. 5
Fig. 2.
Fig. 3
Fig. 1
Fig. 4

DESCRIPTION OF WOODCUT.

The apparatus employed is represented in the preceding woodcut.

Fig. 1. The syringe capable of receiving two ounces of blood: *a*, the barrel; *b*, the part upon which the funnel is received; it is hollow, communicating with the interior of the barrel of the syringe; *c*, the stop-cock; *d*, the extremity of the instrument, to which the silver pipe is affixed when the operation is about to be performed.

Fig. 2. The funnel, composed of two portions; the part standing up is removable at pleasure, rendering the instrument more portable.

Fig. 3. The silver tubule, bevelled at the point, to allow of its more easy introduction into the vein. The operator should be furnished with two or more of these tubes of different calibres.

Fig. 4 represents the mode in which the blood is received into the syringe, and

Fig. 5, The manner in which the injection takes place; the tubule having been inserted into the vein at the bend of the arm.

In addition to the above, a common probe is required, the blunt end of which should be passed under the vein at the lower part of the incision, upon which pressure should be made by the finger of an assistant, to prevent any oozing of blood.

CASE

ILLUSTRATING THE

FATAL INFLUENCE OF GRIEF

DURING THE PUERPERAL STATE.

BY

GEORGE D. GIBB, M.D.,

PHYSICIAN ACCOUCHEUR, AND PHYSICIAN FOR DISEASES OF WOMEN AND CHILDREN, ST. PANCRAS' ROYAL DISPENSARY.

Read March 3rd, 1859.

On the 21st of January, 1859, I was called to see Louisa G—, æt. 28, a young woman of short stature, and delicate frame, whose appearance looked more like a girl of eighteen than twenty-eight. She was confined, on the morning of the 20th, of a stillborn male child, her first. There was nothing unusual in her labour, the pains were regular and strong, and the presentation was a natural one. She was, however, terribly depressed and low spirited, and expressed herself to the effect that she should not survive it. The hæmorrhage at birth was free but not dangerous in character, and, whilst bearing down in one of her pains, the right eyelid became a little ecchymosed; this ecchymosis afterwards disappeared. That night she wandered a good deal, and shivered for several hours after her labour. Next day she seemed exceedingly weak and low, and I was sent for. I found her in a half unconscious state, with her legs drawn up, but with no pain. Her pulse was feeble, and 156. She was moaning and frequently heaving tremulous sighs. She could not be got to answer any questions.

This condition continued, notwithstanding various efforts made to rouse her, and by the next morning she was in-

sensible, but not comatose. Her pulse was 192, breathing slightly hurried, sighing at intervals, pupils a little contracted but influenced by light, and the skin covered with a clammy perspiration. She had taken both nourishment and stimulants during the night, but now there was a difficulty in getting her to swallow. These symptoms continued during the day, and she died at eleven o'clock the same night.

Her history is as follows: Previous to her pregnancy, she had borne an irreproachable character, she had been a Sunday school teacher for some years, and much respected by every person who knew her. She was on intimate terms with a family of several sisters and a brother. The latter became her suitor, and, under a promise of marriage, seduced her, and she became pregnant. The marriage was put off from week to week, until within three weeks of her confinement, when finding that she had been deceived, and that the promises made to her were illusory, she began to grieve, and told her mother she should not survive the birth of her child. All the moral influence that could be brought to bear to dispel her grief was useless, and she seemed as one resigned to her fate. From such a shock to the nervous system she never rallied, and died two days after her confinement. Nothing unusual was discovered after death.

A CASE

OF

EXOMPHALOS,

IN

WHICH THE GRAVID UTERUS FORMED THE HERNIAL MASS.

BY

GUSTAVUS C. P. MURRAY, Esq., M.R.C.S. Lond.

Read April 6th, 1859.

The recital of cases possessing features either of interest or novelty, having been invited by this Society, I venture briefly to narrate the history of a case, which must be considered an exceptional obstetrical phenomenon.

Case.—Mrs. M. A. J—, thirty years of age, and the mother of three children, was greatly alarmed one morning on observing some blood issuing from her navel; springing to her feet from the recumbent position in which she had been lying, the whole of her bowels, as she imagined, immediately burst through the part where the blood had appeared.

On visiting her, she was found leaning against the side of her bed, apparently in great pain, with both hands supporting the abdomen, which appeared of enormous size. She supposed herself pregnant, and in the eighth month of gestation.

On examining the abdomen, a large firm tumour was discovered, the size of a gravid uterus in the latter months. Proceeding more carefully with the examination, the head of a fœtus could be distinctly felt, at the right and upper portion of the umbilical tumour, the remainder of its body extending obliquely downwards towards the left side.

There was superficial excoriation of the skin around the navel, but no division of the linea alba whatever, either upwards or downwards, the continuity of the ring being perfect. The coverings of the hernia consisted of skin, fascia, and peritoneum. The tumour evidently consisted of more than two thirds of the uterus, the lower part towards the os, lying in the grasp of the umbilical ring. It measured seven or eight inches by five. The fallopian tubes were easily recognised, as forming part of the hernial tumour. An examination per vaginam, proved that no os uteri could be felt with the finger, and the vagina was greatly elongated, and narrowed, particularly the upper or uterine extremity of this canal.

It being evident that the patient was labouring under an umbilical hernia, and that the protruded mass was no other than an impregnated uterus of about seven months, the proper course of treatment appeared to be to replace the tumour, if possible, and then to keep the organ *in situ*, until parturition should take place. The umbilical ring, as already stated, was well marked, and measured from three to three and a half inches in diameter; it was capable of great distension. The patient being placed in the most favorable position for reduction, gentle and careful manipulation was exercised, after which, to the astonishment of those who were present, the whole protruding organ and its contents were returned, with comparative facility, into the abdominal cavity, the ring yielding equally all round to allow of the return of the hernial mass.

At first, great and immediate relief resulted, but soon afterwards, the patient complained of impeded respiration, this, however, was not very urgent, and did not long continue. No portion of intestine had protruded with the uterus.

A bandage was now constructed, and applied to the seat of the hernia, it answered admirably, and the patient completed the allotted time of gestation, when, after a short and favorable labour, she gave birth to a healthy female child. The presentation was footling, as had been originally

diagnosed when examining the tumour externally by means of palpation, after the manner of Professor Braun, which has been described by me, in a paper in the first volume of the 'Lancet' for 1858. The mother nursed her child for eighteen months, during which time it continued in good health, but died of convulsions three months after weaning. It should be mentioned, that the mother had always suffered from a small umbilical hernia, which, however, was at all times readily reduced. She is at present in good health, but troubled with the original hernia, somewhat enlarged and consisting of intestine.

I may be allowed to mention two cases of uterine ventral hernia, taken, the one from Madame Boivin's Treatise on 'Diseases of the Uterus;' and the other from Dr. John Burns' 'Principles of Midwifery,' as showing the difference between ventral and umbilical hernia of the gravid uterus.

Madame Boivin reports the case of a woman, who had been the subject of a large abscess, followed by cicatrices just above the pubes, and who had become pregnant. The original cicatrix was observed to become swelled and distended and the uterus to fall more and more forwards until at last it reached even to the knees. In this case, at the period of labour, spontaneous delivery was accomplished by merely raising the tumour so as to bring the axis of the uterus into the right direction.

Dr. Burns states, that he has seen the linea alba give way just below the umbilicus, so as to allow a portion of the uterus to project, but that when the child was born, the tumour disappeared. Madame Boivin also speaks of two cases of hernia of the gravid uterus, which were either crural or inguinal, and in both the Cæsarian section was resorted to. The children were saved, but the mothers both perished. Dr. Tyler Smith has also mentioned a case to me which was communicated to him, in which the gravid uterus at the full term was contained in an inguinal hernia, and in which the tumour, being irreducible, and labour making no progress, the Cæsarian section had to be performed.

The case related in the present paper, differs from the two of ventral hernia quoted from Boivin and Burns, in there being no rupture or division of any of the abdominal fibres, but an equable dilatation of the umbilicus, which allowed the extraversion of the gravid uterus to take place.

It illustrates the amount of handling to which the uterus may be subjected, without producing labour, and also the easy reduction of the tumour by careful management. The success was probably due to the promptitude with which the accident was met.

Probably if the uterus had remained for some days or weeks outside the abdominal walls, adhesions would have taken place, and the return of the tumour would have been rendered impossible.

CASE

OF

CRANIOTOMY.

BY

R. DRUITT, M.R.C.P.

Read April 6th, 1859.

On January 20th, 1859, at 3 a.m., I was summoned to see Mrs. P—, who had been in labour many hours.

I found the patient a tall, healthy looking Irish woman, æt. 32. She had been married at eighteen, and this was her sixth pregnancy. All her foregoing labours had been very tedious; her first produced a boy, living; her second and third, a boy and girl, dead; her fourth and fifth, two girls, living. The present labour had begun on Tuesday, the 18th, at 9 p.m.; the liquor amnii was discharged on Wednesday the 19th, at 2 p.m.; and hard labour had been going on for thirteen hours from the rupture of the membranes to the time of my visit. She had taken one dose of ergot; and the forceps had been introduced, and traction made therewith at intervals, during the last five hours.

On examination the external passages were found cool and dilated, and the forceps remained applied to the head, which had not passed the brim of the pelvis. No force that I employed had any effect.

As it was clear that natural delivery was not to be expected, and as there was no apparent use in delay, and as the forceps and ergot had been administered unavailingly, the question became one of craniotomy or turning; and in the hope of saving the child's life I decided to turn.

The bladder and rectum were therefore again emptied,

and chloroform administered: I then proceeded to turn. The womb, as might be expected, very firmly embraced every part of the child, and contracted forcibly at regular intervals, but the right foot was soon reached and brought down. The turn could not be effected, however, without bringing down both feet; when the nates and abdomen were expelled by the uterine efforts. But, now, no effort nor manœuvre, nor justifiable use of force, enabled me to bring the head into the pelvis, or bring down the right arm; and, in the meanwhile, the infant, from the impression of the cold air, began to make ineffectual efforts at breathing, meconium passed abundantly, and the cord ceased to beat. And now began a new dilemma in the shape of hæmorrhage, which occurred into the womb at each interval of relaxation, the blood being expelled in dangerously large gushes at each contraction. Under this new complication there was nothing to be done but to terminate the labour by craniotomy; so the occiput was perforated, the brain washed out, the cranial bones crushed inwards, and the head extracted. The placenta followed, the bleeding ceased, and the patient recovered without an ill symptom.

So far as I could measure with my finger, the promontory of the sacrum projected forwards, and the symphysis pubis backwards, leaving not more than three inches between them. The child's head was very firmly ossified, and hard as a cocoa-nut; its circumference fifteen and a half inches. It was a female.

In this patient there was clearly such a degree of contraction as would render the passage of the fœtal head difficult if of ordinary dimensions, and impossible, if unusually large. It is just the case, therefore, in which a child's life may be saved, and a barbarous operation averted, by inducing labour prematurely, if this poor woman should have the misfortune to become pregnant again.

SOME RECENT CASES (FOURTEEN)

ILLUSTRATING THE

PHYSIOLOGY AND TREATMENT

OF

PLACENTA PRÆVIA.

BY

ROBERT BARNES, M.D., F.R.C.P.,

PHYSICIAN TO THE ROYAL MATERNITY CHARITY; ASSISTANT OBSTETRIC PHYSICIAN TO THE LONDON HOSPITAL.

Read April 6th, 1859.

I AVAIL myself of the opportunity afforded by the foundation of the Obstetrical Society of London, to elicit the experience of its fellows in illustration of the cardinal principles in the Physiology and Treatment of Placenta Prævia. This I propose to do, first narrating my own observations since the publication of the 'Lettsomian Lectures,' in which the views I had arrived at are set forth; and, in the next place, by appending brief commentaries upon these observations, and a summary of propositions embodying the lessons which they appear to me to teach.

The cases themselves, fourteen in number, will be, in any event, of value, as a contribution to the clinical history of placenta prævia. The facts are recorded as they occurred, and as they were observed; and as such they will remain—the groundwork for theoretical interpretation by others as by myself. The cases are not classified; but are arranged in chronological order.

CASE 1.—On the 16th of December, 1857, I was called to a patient of the Royal Maternity Charity, who was flooding before labour. She was about eight months gone with her second child. Her first labour had been premature,

but otherwise natural. Her age was now twenty. At noon, yesterday, when away from home, she was seized with flooding described as "alarming;" and was brought back in a cab. The waters broke about 3 p.m., and there was more flooding at intervals up to 9 p.m. At 2 a.m., on the 16th, the midwife found a hand presenting, and sent for me. I saw the patient at 4 a.m.; no flooding now; os dilated to size of half-a-crown; edge sharp, rigid; a bunch of funis protruding pulsating; hand felt just inside os. Patient had a fair pulse and good pains. Determined to allow os to dilate a little further before turning. At 6 a.m. the os having enlarged to the size of a crown, I introduced my left hand, seized a foot which was lying near the os, and near the presenting hand. This was brought down; the passage of the trunk was very tedious, owing to rigidity of os. The whole funis prolapsed; and pulsation ceased before head was born. Child was born flaccid, not livid, and dead. The placenta was withdrawn in five minutes. The uterus contracted well; no post-partum hæmorrhage. The placenta was entire; one edge was bevilled off very thin, but there was ecchymosis or infiltration with coagulated blood; the seat of the rent in the membranes was at the very margin of this flap; and close to this margin was the origin of the cord.

The appreciation I have to offer of this case is as follows:—The placenta had dipped down on one side within the cervico-orificial zone, as far as the os internum. The inclined plane formed by adhesion of the placenta to the lower segment of the womb, rendered moreover solid, by reposing on the lower lumbar vertebræ and sacral promontory, had thrown the child's head over the pubes, causing a transverse presentation; the belly being thus brought over the os, and the funis springing from the edge of the placenta close to the os, the whole mass of the cord fell through the os as soon as this expanded. The hæmorrhage was caused by the first detachment of placenta at the beginning of orificial expansion; and arrested at intervals by pains. It

was not arrested on spontaneous rupture of membranes, because pains were not efficient afterwards, and because there still remained a portion of placenta adhering within the orificial zone. When pains were active, and the os had expanded to the size of half-a-crown, then there was no more hæmorrhage, although there was certainly no pressure of the child against the os. The motive for artificial delivery was the transverse presentation.

The patient suffered somewhat from after-pains, but did well.

Case 2.—On the 20th of February, 1858, I was called by a midwife of the Royal Maternity Charity to a case of præ-partum flooding. The patient had previously had children, one being still-born. When five months pregnant she had a sudden smart attack of flooding; a second seven or eight days afterwards; a third after another week; and a fourth on the 18th inst. When I saw her she was six months gone; the hæmorrhage was abating; the os high up, patulous, easily admitting finger, but cervix still an inch long; did not feel placenta; she has had forcing pains; bowels costive. Satisfied that labour must come on, gave half an ounce of castor-oil; the moment this began to act, pains came and child was born, footling, but placenta presenting. There was some hæmorrhage before and after delivery. Woman was weak. The *placenta* was small, deeply sulcated, healthy; the cord was inserted, and the rent in the membranes was on the very edge; the membranes, where stretched over os, thicker than elsewhere; no appearance of coagulum in substance of placenta, nor any different appearance at presenting margin. Patient recovered well.

Case 3.—On the 12th of April, 1858, I was called to a case of præ-partum flooding at Haggerstone. The woman had borne several children, the last three of which were born dead. She was now about six months pregnant by reckoning. Seven days ago first had flooding,

which was arrested after persisting two days; was free for three days, but kept her bed. Yesterday a sudden profuse gush came; more or less discharge ever since, but no effective pains. I saw her at 2 p.m.; found patient weak, but still with a fair pulse; she had lost copiously.

Internal examination.—Os fully expanded; some clots and fluid blood from uterus during examination; the placenta was detached all round cervix. In order to save the child, and to secure against return of hæmorrhage, the uterus being inactive, I turned by bringing down one foot. This was done without any distress to the mother. The delivery was completed in ten minutes, contraction being excited by the operation and pressure externally. The placenta was expelled immediately after child. The cord and rent were close to the margin; no part showed extravasation, or altered blood. The child was born alive, and lived.

Case 4.—On the 12th of April, 1858, I was sent for by a surgeon near Victoria Park, to meet him at a case of placenta prævia. The patient was a delicate woman, about six months gone with her third child. The first two were born alive; the second is now only fifteen months old. She has lost profusely for a week; and this morning there was an alarming bleeding. She has rejected two doses of ergot. At 10 a.m. it is reported that the os uteri was not dilated; she has had "grinding, crampy" pains. I found her at 1·15 p.m. excessively prostrate; lips bloodless; face anxious, cold; hands cold; pulse scarcely to be felt; she was conscious, but spoke with a very feeble voice; *no headache.*

Internal examination.—Os fully dilated; clots in upper part of vagina; placenta detached from posterior surface of cervical zone; uterus not contracting well. Advised delivery, in order to ensure contraction, although it was doubtful whether the patient would survive the operation. The surgeon turned; delivered in half an hour; pressure kept up externally excited fair contraction during delivery; the patient was conscious of expulsive contractions; said she felt better; but expired without convulsions, by gradual

ebbing of respiration immediately after delivery. I do not think the delivery accelerated death. The temporary reflex and emotional stimulus of uterine contraction excited a slight rally. She swallowed a little wine before and during operation. Placenta followed immediately. Uterus remained contracted after death. Child still-born.

Plugging, ergot, galvanism, and total cervico-orificial detachment of placenta the day before or earlier, might have saved this woman.

Case 5.—On the 3d of May, 1858, I was called by a midwife of the Royal Maternity Charity, to a pluripara, who had been seized with copious flooding that morning. She had no loss before. When I arrived, no hæmorrhage; os size of a crown-piece, soft; uterus tonically contracted, but pains rare and slight; on sweeping finger round os internum, found placenta passing over os; the bulk being attached posteriorly; the flap of placenta extended to an inch or more across os to anterior part of uterus; membranes entire; head presenting, but no pressure from it on cervical region. I detached the placenta from all round the cervical zone. The hæmorrhage had not caused much constitutional exhaustion. Several doses of ergot seemed without effect. I ruptured the membranes; some liquor amnii escaped, and I then left, feeling confident there would be no return of hæmorrhage. She was delivered normally a few hours afterwards; and recovered favorably. The child also survived.

Case 6.—On the 21st of May, 1858, I was called to a pluripara, a patient of the Royal Maternity Charity, who had been delivered on the 19th inst. Mr. Edmunds, of Spital Square, had delivered her by turning, on account of hæmorrhage from prævial presentation of the placenta. On the 20th she had fever, tympanitis, and prostration. When I first saw her, at 10 a.m., on the 21st, forty-eight hours after delivery, the pulse was feeble, 100; skin hot, countenance anxious; considerable tympanitis and tenderness of

abdomen; lochial discharge not excessive; bowels not relieved. (Her *habitat* was not particularly confined; there was thorough aëration). I ordered half an ounce of castor-oil, with ten drops of laudanum, to be taken immediately; and a mixture of bark, ammonia, and chloric æther, every four hours. On the 22d and 23d she seemed somewhat better; but, on the 24th, a copious loose stool passed; the pulse was quick, irregular in force, and intermitting; she had cough, occasional syncopal feelings, and pain localised in left iliac region. On the 25th and 26th the diarrhœa continued; the tympanitis and depression increased; and death followed at 7 a.m. of the 27th. The child was still-born. This patient died of puerperal fever, having its origin in uterine inflammation. That she was the more disposed to this fatal complication by the contusion to which the highly developed and vascular cervico-orificial structures of the womb were exposed by the forced delivery I do not doubt.

Case 7.—On the 10th of June, 1858, I was called by a midwife of the Royal Maternity Charity, to see a Jewish primipara, suffering from flooding. She was about seven months pregnant. Whilst dressing this morning she was seized with sudden flooding, very profuse; this continued draining till she was seen by midwife at twelve. The midwife not making out presentation, came for me. At 12·45 the os was dilated to the size of the rim of a wine-glass; clots in vagina at os; mass of placenta felt covering os; it was partially detached, the adherent part being situate in fore aspect of uterus; the placental presentation was complete. The examination excited pains, and finding cervical portion of placenta detached on one side, I completed the detachment from the anterior cervical region, and withdrew the hand. The head was presenting. Gave two doses of ergot at intervals of twenty minutes: no sensible effect. At 2 p.m., only slight oozing had been going on. There was fair tonic contraction; but no expulsive pains. Finding the os nearly fully dilated, and a knee accessible without forcing the hand

through, I seized this, and brought down breech to outlet, promoting delivery by pressure on uterus externally. Placenta followed immediately; it was small; the two thickest lobes, constituting quite half the placenta, were infiltrated and covered with coagula; the remainder of the organ had been normally cast off after expulsion of head. The insertion of the cord was near the normal edge, which had been most remote from the os uteri. The uterus contracted well. The child survived. The mother did well.

In this case time was gained for the expansion of the cervix, which was excessively irritable to the touch, and to dilate which artificially would have been dangerous.

Case 8.—On the 27th of July, 1858, I was summoned by a midwife of the Royal Maternity Charity to a case of præ-partum flooding. The patient was a Jewess, who had had twelve children, but never hæmorrhage before. She is now seven and a half months gone. She was taken ill with hæmorrhage without pain, when up, but not having used any exertion on the morning of the 26th. This returned more freely at 4 a.m., of the 27th. I saw her at 6·45 a.m. There was still some flow; os size of a crown, soft; head presenting; placenta at posterior lip; pains slight. Gave ergot; pains slightly improved in five minutes. I then ruptured the membranes, and gave a second dose of ergot. The child was born without further hæmorrhage at 9·30 a.m. The uterus contracted fairly; but the midwife to whom I intrusted the removal of the placenta could only bring down a part. I introduced my hand, and felt a part of the placenta adhering near the fundus. I was unable to separate all this without undue force and risk of injuring the proper structures of the uterus; the greater part was brought away. The placenta, being examined, was found lacerated, one lobe missing; the cord was inserted one and a half inch from margin; and the rent in the membranes was close to this margin. The mother recovered without a bad symptom.

Case 9.—On the 23d of August, 1858, I was called to a woman who had had fourteen children. She was at the full time. Copious hæmorrhage came on for the first time at 4 a.m. this morning, and continued, with intermissions, till 2 p.m., when the midwife ruptured the membranes, and gave small doses of ergot; it then ceased. I saw her at 4 p.m. She was much blanched; her pulse was weak, but courage good; the head presenting pressed upon the os uteri, which was expanded to size of rim of a small wine-glass. On sweeping the finger round the inside of the os, and lifting up the head, a quantity of the liquor amnii escaped; the edge of the placenta was felt detached posteriorly. Ordered brandy; and left her to natural efforts under care of midwife. The mother did well.

Case 10.—In October, 1858, I saw, from time to time, a patient of the Royal Maternity Charity, who was suffering from discharges of blood. She was in the last month of her seventh pregnancy. On the 24th of September, when out walking, without pains or other warning, she was taken with hæmorrhage. This continued more or less. On the 1st of October a clot, the size of an egg, passed; on the 6th, 7th, and 8th, the hæmorrhage continued. On the 8th the os was the size of a half-crown piece; the placenta was felt completely over os. On the 9th there was rather free hæmorrhage; when I saw her the os was the size of the rim of a wine-glass, and dilated; the bulk of the placenta was attached posteriorly, but stretched across os three inches anteriorly. I swept the finger round inner cervix, detaching placenta from lower zone. The uterus felt hard, but there was not sufficient contraction to cause tension of the membranes, which appeared to contain very little liquor amnii; the head was presenting. No hæmorrhage followed the operation. A third dose of ergot aroused moderate contractile energy, but still no bulging of membranes. Seeing no prospect of active contraction, and the midwife being absent, so that I could not depend upon the case being properly watched, I determined to deliver. One knee was

readily brought down, but the hand had to be passed through the os. On bringing the body and head through the os there was some obstruction from the tightness of the os around these parts. The pressure stopped the circulation in the cord. The child was stillborn. No hæmorrhage followed. The uterus contracted well. The placenta came away entire; there was very little laceration of its substance; the cord was inserted about three inches from the margin.

The patient remained weak for some time, with considerable discharge, not coloured. She had quinine and calumba, and did well.

Case 11.—On the 23d of January, 1859, I was called to a patient of the Royal Maternity Charity, the mother of several children. She never had præ-partum hæmorrhage before. She is now seven months pregnant. She was taken with flooding in the morning; this had been profuse at intervals during the day. When I saw her at 7 p.m. the os was fully expanded, and the membranes protruded; the contractions were good. There was no hæmorrhage, either during pains or during the intermissions when the bag was flaccid and could exert no pressure on the internal surface of the cervical zone. I swept the finger freely round the lower polar circle, and found the placenta quite detached from this region. I ruptured the membranes, and the child was presently expelled alive. It however died seven hours afterwards. The placenta was very large; a space near the margin, extending for two inches, was infiltrated with coagulated blood, and the surface also was covered with recently coagulated blood; close to this part of the margin was the rent in the membranes; and the cord sprang from the same spot.

In this case, the placenta had been attached to the posterior aspect of the lower polar zone, covering at least one-half of this zone. It had been detached from this part during the progress of labour; hæmorrhage had ceased when

the separation had reached the lower polar circle. The remainder, constituting the larger portion of the placenta, preserved its attachment until after the expulsion of the child, when it was cast off, as in ordinary labour, under contractions excited, in this instance, by external graspings of the uterus.

The mother did well.

Case 12.—On the 7th of February, 1859, I was called to a pluripara, whose term had expired. On the 6th, she had one smart copious hæmorrhage. Pains abated till 7 a.m. of the 7th. The midwife felt the funis at 10; pains now strong, but no progress. I saw her at 1 p.m.; a loop of funis was hanging in vagina pulseless; os fully opened; right shoulder presenting. Gave a drachm of laudanum; introduced left hand into uterus; felt right shoulder over centre of os, forehead and face projecting forward, and a little to left over pubes; uterus contracting pretty strongly under stimulus of hand; this was, nevertheless, passed on without much difficulty over the face, past the chest to seize the right knee, which lay nearest; this being drawn down, version was soon completed, and delivery effected by aid of pressure externally. The uterus contracted well, and cast the placenta. The placenta was large and thick; the rent in the membranes was one inch and a half from the margin; this margin was covered with coagulated blood, which appeared to have escaped chiefly from the uterus at time of hæmorrhage; the uterine surface about *this cervical segment* was studded with calcareous spots; having been detached, and the cervix *re*tracting to open, *i.e. con*tracting, no more hæmorrhage took place. Delivery by turning was of course performed on account of the transverse presentation. The placental presentation was, in this case, clearly the cause of the transverse position of the child. The thick cushion of placenta lying on the posterior wall of the uterus, down to the edge of the os, formed by resting on the sacral promontory a solid inclined plane, whilst the anterior wall of

the uterus was itself thin and yielding, and received little support from the lax abdominal wall of a pluripara. Under the influence of pressure from above downwards the child's head had been thrown over the pubes, rotating on its transverse axis, and thus a first cranial was converted into a transverse presentation. The funis which sprang close to the cervix, was thus allowed to slip through. The child was very large, and had probably been dead some hours. That the hæmorrhage did not stop from any pressure exerted upon the placenta, or the bared surface of the uterus, is proved by the circumstance of the head resting forwards above the pubes, leaving the posterior wall where the placenta had been loosened without pressure, and allowing the funis to fall freely through. This position of parts was distinctly determined during the manipulation of turning.

Patient complained somewhat severely of after-pains, but made a good recovery.

Case 13.—I was sent for, on the 11th of February, 1859, to see a pluripara, who, being near her time, had been seized with hæmorrhagic discharges, consisting chiefly of black clots, without pain; this had gone on for three days. She was taken with labour-pains at 4 a.m.; a more copious discharge of blood took place at the beginning; the membranes had ruptured spontaneously; the labour was quick, terminating at 6 a.m. Child alive; small, but mature. Rather free discharge of blood followed delivery. The placenta was large; the rent in the membranes was two inches from the margin; the insertion of the cord was two inches from the same edge; a little blood was infiltrated here.

The placenta had been inserted just within the cervical zone. There had been partial detachment on approach of labour, causing bleeding and passage of clots; and cessation of bleeding on accession of true labour-pains and discharge of liquor amnii.

The woman suffered somewhat from anæmia, but did well.

8. That in the case of partial placental presentation, where an edge of the placenta dips down to near the edge of the os uteri internum, the umbilical cord commonly springs from that edge; and that thus is explained the liability to prolapsus of the funis in cases of placenta prævia.

9. That adhesion of the placenta to the os uteri internum impedes the regular dilatation of the part, and, consequently, during such adhesion, interferes with the proper course of labour.

II.—*Series of Therapeutical Propositions.*

1. That inflammation of the uterine structures, particularly of the cervix, is especially likely to supervene upon delivery attended by placental presentation; and that the danger of this complication is increased by the forcible dilatation and contusion of the vascular cervix, caused by the introduction of the hand, or by the extraction of the child. That one of the purposes intended by nature in fixing the seat of the placenta at the fundal and middle zones of the uterus, is the preservation of the parts rendered highly vascular by connexion with the placenta, from the distension, pressure, and contusion attending the passage of the child.

2. That the greatest amount of flooding generally takes place at the *commencement* of the labour, when the os is beginning to expand. That the os is always, from its being near the seat of the placental attachment, highly vascular, and is frequently, at this stage, very rigid. That any attempt to force the hand through this structure, at this stage, either for the purpose of wholly detaching the placenta, or of turning the child, must be made at the risk of injuring the womb; and that the dragging the child through the os when in this condition—even when it has not been necessary to pass the hand into the uterus—is a proceeding affording slender chance of life to the child, and dangerous to the mother.

3. That the entire detachment of the placenta is not necessary to ensure the arrest of the hæmorrhage; and that, therefore, it is not necessary either to wholly detach the placenta before the birth of the child, or, in cases uncomplicated with cross-presentation, to proceed to forced delivery with a view to wholly detach the placenta after the birth of the child.

4. That, since the dilatation of the cervical portion of the womb must take place in order to give passage to the child, and since, during the earlier stages of this necessary dilatation, hæmorrhage is liable to occur, it is desirable to expedite this stage of labour as much as possible.

5. That in cases where labour appears imminent, with considerable flooding, whilst the os internum uteri is still closed, the arrest of the flooding and the expansion of the os may be favoured by plugging the vagina, and especially the cervix, by the use of ergot, by the stimulus of galvanism to the uterine muscles, or by the method recommended by Professor Braun for bringing on labour in puerperal convulsions.

6. That, since a cross-presentation, or other unfavorable position of the child at the os internum uteri is apt to impede or destroy the regular contractions of the uterus which are necessary to the arrest of flooding, it is mostly desirable in cases complicated with unfavourable positions of the child, to deliver as soon as the condition of the os uteri will permit.

7. That, in some cases, the simple use of means to excite contraction of the uterus, such as ergot, rupturing the membranes, the administration of a purgative, or the employment of galvanism, will suffice to arrest the hæmorrhage.

8. That, in some cases where it is observed that the os uteri has moderately expanded—namely, to the size of a crown-piece, or less,—the placenta being felt to be detached from the cervical zone, and the hæmorrhage having ceased, it is not necessary to interfere with the course of the labour, now become normal.

9. That, at the critical period, when the total detachment of the placenta, or forcible delivery are dangerous or impracticable operations, the introduction of the index finger through the os, and the artificial separation of that portion of the placenta which lies within the lower or cervical zone of the uterus, is a safe and feasible operation.

10. That the artificial detachment of all that portion of the placenta which adheres within the cervical zone of the uterus will at once liberate the os internum uteri from those adhesions which impede its equable dilatation; and, by facilitating the regular contraction of this segment of the uterus, favour the arrest of hæmorrhage; and convert a labour complicated with placental presentation into a natural labour.

A CASE

OF

EXTRA-UTERINE FŒTATION.

BY

C. WALLER, M.D.,

OBSTETRIC PHYSICIAN AND LECTURER ON MIDWIFERY AT ST. THOMAS'S HOSPITAL.

Read May 4th, 1859.

A CONSIDERABLE number of perfectly formed fœtal bones, exhibited to the Society by the author, had passed from the rectum of a female, æt. 47. The following were the particulars of the case as detailed by herself:—About ten years ago, she became pregnant, and proceeded to the full period of utero-gestation without experiencing any unusual amount of inconvenience or pain. At the end of the ninth month, labour pains occurred, and there was a slight sanguineous discharge from the vagina. These pains continued for a few days, and then ceased altogether.

A month after this period, menstruation (which had been suppressed during the usual time of gestation), was established, and recurred with great regularity for a period of ten years.

It then became irregular, and the woman suffered from occasional shiverings; hectic fever came on, with great prostration of strength; there was extreme emaciation, night sweats and diarrhœa.

Difficulty and pain were experienced in the passage of the motions; on examining the dejections, fœtal bones were discovered, the smaller of which passed tolerably easily, the larger ones, however, had to be removed by the finger.

These bones continued to pass for several days; at last the diarrhœa ceased, and the patient was restored to health.

Whether the conception was tubal or ovarian, could not be ascertained, but in whichever situation it took place, adhesion must have occurred between the cyst and the intestine, through the canal of which the various bones were at length discharged.

CASE

OF

TUBAL PREGNANCY,

WITH

FIBROUS TUMOURS OF THE UTERUS.

WHICH OCCURRED IN THE PRACTICE OF

J. A. MAGRATH, M.D., KINGSTON, JAMAICA.

BY

GEORGE HARLEY, M.D.,

PROFESSOR OF MEDICAL JURISPRUDENCE IN UNIVERSITY COLLEGE, LONDON, AND PHYSICIAN TO THE NORTHERN DISPENSARY.

Read May 4th, 1859.

JANE THOMAS æt. 22, a fine healthy looking black woman, seen by Dr. Magrath on the 30th of August, 1856, at 9 a.m. Was said by her friends to be five or six months advanced in her first pregnancy; she had been complaining for the last month or six weeks, of general abdominal uneasiness, and pain in the left iliac region; the previous evening the pain increased severely, and towards midnight, she began to vomit, and became weak, cold, and extremely restless; her friends had given her stimulants, &c. She had always enjoyed good health, except that she suffered from dysmenorrhœa.

When seen, she was in a state of complete collapse, cold, pulseless, with feeble voice, restlessness, alternating with drowsiness, and anxious but not sunken countenance, vomiting everything she took.

She was perfectly conscious, and complained of much pain and tenderness over the whole abdomen, but parti-

cularly at the upper part of the left iliac region; the abdomen was tumid and soft, nothing abnormal could be found in the situation of the greatest pain, but in the hypogastric region there was a firm, very moveable, irregular tumour, about the size of the uterus at the sixth month of pregnancy.

The vagina was natural, but cooler than usual, there was no discharge, the cervix uteri rather high up and turned to the left side, enlarged, soft, and cushiony; the os was round, dimpled, and closed; the body of the uterus felt unequally enlarged, and firmer than usual, but not tender. Movement of the tumour through the abdominal walls was felt in the vagina to move the uterus, but not as if the two were closely connected; by the rectum, the posterior wall was found enlarged, firm, and flattened; the bladder was empty; no fœtal sounds could be heard. She died at 11 a.m. the same day.

Post-mortem examination. — 2 p.m. Body stout, well made, healthy looking, no bruises or marks of injury. Countenance placid, lips and eyelids bloodless, abdomen enlarged and tympanitic.

On opening the abdomen a large quantity of dark fluid blood, mixed with coagula, was found among the intestines; on this being removed, a fœtus of about five months' growth was seen lying under the arch of the colon, on the left side, and attached by its umbilical cord, to the interior of a dark coloured, round tumour, about the size of a large orange, situated in the left iliac region. In the superior wall of the tumour was a large, rugged opening, through which the fœtus and blood had escaped. Both ovaria, with the fimbriated extremities of the Fallopian tubes, were healthy. The uterus was very irregular in shape and had several tumours attached to it.

The parts having been carefully removed, and the vagina opened anteriorly, the cervix was found enlarged and soft, the os round, dimpled, and closed by a muco-gelatinous plug. The cavity of the uterus contained a false decidua. The irregularity in form, and elongation of the uterus, is due to

the presence of a number of fibrous tumours of various sizes imbedded in its walls. Arising by a narrow pedicle about the middle and on the left side of the uterus, is another fibrous tumour of the size and shape of the kidney of an ox.

On examination of the tumour in the left iliac region, it was found to consist of an expansion of the walls of the Fallopian tube equidistant between its fimbriated extremity and uterine attachment.

The parietes of the tube at the point of dilatation are considerably increased in thickness, the non-striated variety of muscular fibre being distinctly visible; that portion of the tube opposite to the attachment of the placenta has undergone an immense hypertrophy, taking on the appearance of impregnated uterine tissue.

The boundaries of the placenta itself cannot be ascertained without doing considerable injury to the preparation, in consequence of the effusion of a large quantity of blood both into and around it; it appeared, however, to be chiefly attached to the upper wall of the tube. The tube itself is not shortened by its lateral dilatation, but seems lengthened. Its orifice within the uterus cannot be made out.

The ovaries are full-sized and healthy, the left contains a well-marked corpus luteum.[1]

The fœtus was a well-developed male of about five months; the cord was natural, eight and a half inches in length.

This preparation is now in the museum of University College.

[1] Kussmaul says that in a case of tubal pregnancy which he examined the ovum had passed from the right ovary, across the uterus, entered the left Fallopian tube, and been there developed. In the above case, however, the ovum had most probably come from the left ovary, and had never got the length of the uterus.

EXPLANATION OF DR. HARLEY'S PLATE OF A CASE OF TUBAL PREGNANCY.

1. Uterus slit open in front, the fig. is opposite to the neck of the organ.
2. False decidua in the upper portion of the uterus.
3. Large fibrous tumour embedded in the fundus of the uterus.
4. Another large dense fibrous tumour attached to the fundus by a narrow neck close to the insertion of the left Fallopian tube.
5. The Fallopian tube pushed downwards by the tumour.
6. Great enlargement of the left Fallopian tube towards its middle, containing the pregnancy.
7. Continuation of the Fallopian tube beyond the pregnancy, with its fimbriated extremity lying on the left ovary.
8. The left ovary.
9. Rupture in the side of the dilated tube through which the fœtus escaped into the abdominal cavity.
10. Large circular clot of blood projecting beyond the retracted ruptured walls of the tube.
11. Section made of the walls of the Fallopian tube to show their greatly increased thickness. The enlarged muscular fibres at this point were well seen under the microscope.
12. The umbilical cord proceeding from the placenta, which is chiefly attached to the upper wall, and on the side of the tube next the uterus.
13. Male fœtus with some clotted blood round its legs.

W West imp

DESCRIPTION

OF AN

ANENCEPHALIAN MONSTER.

BY

R. UVEDALE WEST, M.D., ALFORD, LINCOLNSHIRE.

Read May 4th, 1859.

GEOFFROY ST. HILAIRE prefaces the description of his family of *Anencephalian* monsters thus:—

"The Teratological series has offered us, in the two preceding families, examples, first, of displacement of the brain (*Exencéphalie*), then of its almost complete atrophy (*Pseudencéphalie*). The Anencephalian monsters will now present to us a condition of the head still more anomalous—the complete absence of the brain. . . . . .

"The family comprises only the following genera:—

1st. Genus I. *Dérencéphale.*

No brain; spinal marrow wanting in the cervical region; skull and superior portion of spinal column widely open.

2d. Genus II. *Anencéphale.*

No brain and no spinal marrow; skull and spinal column widely open.

. . . . . .

M. St. Hilaire then describes more minutely the first genus *Dérencéphale,* and goes on to say:—

"Thus, in the cervical region, the vertebral canal is widely open, as is also the cranial cavity, to which it is analogous anatomically; and the spinal marrow, of which the brain is an expansion, is wanting, as well as the brain itself. But what essentially distinguishes *Dérencéphalie* from *Anencéphalie*—the vertebral column and spinal marrow, are normal in their inferior portion. . . . . The skin covers

the dorsal and lumbar regions, as well as almost the whole of the body; but it is not so with the skull and the cervical region. The common integuments not only do not cover the fissured vertebræ, but they stop short at each side, so as to leave a vast interval . . . . At first this interval is occupied by a voluminous pouch, full of serosity; this pouch is usually ruptured in the birth. . . . . As for their form and physiognomy—their eyes are voluminous, very prominent" (in the subject exhibited they are not collapsed), "and placed at the most elevated part of the head, the forehead being entirely wanting. . . . The head is so sunk between the shoulders, that the ears rest upon them, and the chin reposes upon the breast, etc., etc."

It would appear from M. St. Hilaire's account, that this particular genus of monstrosity, *Dérencéphalie*, is somewhat rare:—

"Three cases described by Vincent Portal collected—the first by his grandfather, the second by his father, the third by himself, and another example, published by the elder St. Hilaire, are" says St. Hilaire, "the only truly authentic examples possessed by science."

And, further on, in his description of Genus II, the complete form of the family *Anencéphalie*, to which, therefore, he gives the generic term "*Anencéphalie*," he says:—

"I think, therefore, I am within the truth when I maintain that *Anencéphalie* is four times more common than *Dérencéphalie*."—'*Anomalies de l'Organisation*,' Geoffroy St. Hilaire; tome ii, pp. 351—357, and p. 363.

From the above abridged description, it will be seen that the monster now exhibited is a perfect specimen of St. Hilaire's rare genus "*Dérencéphale*."

With regard to the birth of the monster, I had a little trouble with it; there was enormous redundancy of liquor amnii, which had escaped before my arrival, filling two utensils. I found the patient, a woman who had had a large family of healthy well-developed children, with strong and frequent pains, and with what I thought was the *head*

of a putrid fœtus low down in the pelvis, for I undoubtedly felt some cranial bones near the pubes; but I was puzzled by some unusual complications, thus:—The bones felt as if *uncovered* by skin, and I could not understand why the head of a putrid fœtus should take so much pushing through the pelvis. Again: a hand and arm would keep coming down, and although repeatedly pushed back they still came down again and again. I could feel the shoulder, too, of this arm; and I was quite certain that there were some hard cranial bones above the pubes, refusing to pass under the arch, so that I thought the presenting mass must be a very large head. I had no instruments with me, and was six miles away from home, in a lonely village (I had been summoned to the case from a neighbouring farmer's, where I was in attendance on a case of illness). Feeling convinced that the fœtus was dead, I, after some consideration, perforated the presenting part with a pair of scissors, and introducing a forefinger, readily pulled away the fœtus, which I now found had presented the *back*, as will be seen by the situation of the perforation. It was the widely open head and neck I had felt—the head having been above the pubes; and the back, doubled, had been squeezed into the pelvis. Delivery would have been easy enough if I had known what was the true nature of the case; even if I had pulled at the arm, the little knob of a head would have come down. As it was, the whole of the fœtus was in the vagina, and the uterine contractions could no longer exert themselves upon any part of it. I need not add that the fœtus was quite dead.

The placenta was enormous; indeed, I have before observed redundancy of liquor anmii, and hypertrophied placenta coincident with deficient development of the fœtus —the most remarkable instance having been in a case of *exencephalous* monster, which I met with some years ago.

ABORTION,

WITH

ALBUMINURIA AND CONVULSIONS,

IN SIX SUCCESSIVE PREGNANCIES,

UNDER THE CARE OF

DR. TYLER SMITH, AT ST. MARY'S HOSPITAL.

REPORTED BY

W. H. BROADBENT, M.B. LOND.

Read May 4th, 1859.

ELIZABETH OUTRAM, æt. 32, was admitted into the Boynton Ward of St. Mary's Hospital, under the care of Dr. Tyler Smith, on December 10th, 1858.

History.—She menstruated for the first time at the age of eighteen but for nearly two years previously had periodically spat blood; whether it came from the stomach or air-passages cannot be made out from her statements; menstruation has been irregular, and from time to time she has suffered from leucorrhœa.

She was married six years since, and about nine months after marriage miscarried, between the sixth and seventh months; she had no convulsions on this occasion, and did not lose much blood.

Subsequently she has miscarried five times, always at the same period of gestation, and there have always been convulsions, increasing in severity with each miscarriage. During the fits she bites the tongue. After the last abortion (six months ago) she remained insensible for some time.

About a year and nine months ago, she first came under

the observation of Dr. Tyler Smith; she was then pregnant for the fourth time, and between the third and fourth months. The right leg was œdematous, and the urine was found to be highly albuminous, coagulating on the application of heat, like white of egg; she declined to come into the hospital at that time and miscarried at the usual period, with convulsions; she has done so twice since, and is now pregnant for the seventh time, and thinks she has gone about four months and a half. It was the wish of Mr. Henley, of Croydon, that she should place herself under the care of Dr. Tyler Smith.

Present condition, December 13th, 1858.—She is pale; there is a slight appearance of dropsical fulness under the eyes; the face wears an expression of nervous apprehension; she complains of "dimness of the eyes," and says her head seems to "turn round." Her intellect is evidently affected; she has great difficulty in recollecting past events, and seems confused when a question is first put to her; she is very apprehensive of danger in her confinement; the sister of the ward says she is best when occupied in any little matter, but that she cannot be trusted alone. The appetite is good; the bowels regular; tongue clean; pulse 65. She passes urine frequently in small quantities, it is normal in appearance, contains no albumen, but an excess of phosphates.

18th.—General health improved; she is in better spirits; the urine is normal in quantity and appearance, deposits a mucous cloud on standing; by heat is rendered slightly turbid, but is at once cleared again by nitric acid.

23d.—Continues to improve; occasionally thinks "a fit" is coming on, but when the attention is distracted by some light occupation, she forgets her fears.

The urine contains no albumen, and apparently less of the phosphates. She wishes to spend Christmas at home, and accordingly leaves the hospital for a short time.

January 17th, 1859.—She was brought back to the hospital last evening by her husband, who stated that on the 14th she had had seven fits. On admission her face bore a wild expression, and she was unable to express herself

CASES

OF

POLYPUS OF THE UTERUS;

WITH

CLINICAL OBSERVATIONS.

BY

FRANCIS ELKINGTON, M.D., &c.,

LECTURER ON MIDWIFERY AND THE DISEASES OF WOMEN AT THE SYDENHAM COLLEGE, BIRMINGHAM.

Read May 4th, 1859.

In reporting the following cases, I have endeavoured to condense the material as much as possible, without interfering with the interest of the report.

Polypus Uteri.

Case 1.—Sarah W—, æt. 37, was admitted as an out-patient of the Lying-in Hospital on the 2d of April, 1849. She states that she has had eleven children; has ten living; was confined of the last April 6th, 1848. The labour was a favorable one, but there was some adhesion of the placenta, which required the introduction of the hand for its removal. She has had constantly some discharge ever since her confinement. Until the last month the discharge has been chiefly of a watery character, and so abundant, as to soak *four or five napkins* each day, but scarcely to colour them. During the whole of the last month she has had almost constant flooding; at times coagula have been expelled with pain; at other times she is free from pain. She is suckling; looks *very pale* and thin. Her pulse feeble; tongue large, soft, and flabby; appetite bad. On making an examination per vaginam, I found a tumour of the size of a small hen's egg, insensible to the touch, occupying the upper part of

the vagina, the os uteri, and apparently attached to the inner surface of the cervix uteri. I introduced the uterine sound on one side of the tumour, and ascertained that the cavity of the uterus was slightly elongated. Diagnosis, polypus uteri. She was ordered to wean her child immediately, to keep perfectly quiet, and to take a tonic, with diluted sulphuric acid three times a day.

April 30th.—She is something better in health, but the discharge continues, although she has not, lately, lost quite so much. Her milk is entirely gone.

May 5th.—Applied a ligature around the tumour, with Gooch's canula.

10th.—The ligature came away this morning. It had been tightened every night and morning. There was slight ulceration of the os uteri, which was cured by a few applications of nitrate of silver and by the use of astringent injections. She gradually recovered, became pregnant, and was confined in March, 1850.

In this case there are some features worthy of notice. In the first place, as her eleventh labour was accompanied by adhesion of the placenta, which required a manual operation for its removal; and secondly, as she had been troubled with a constant discharge from the date of her confinement, there was some reason for suspecting the existence of partial inversion of the uterus. All doubt on this head was removed by the use of the uterine sound. Again, as she was suckling at the time I first saw her, I did not think it right to subject her to an operation for the removal of the polypus until she had weaned her child, and the breasts were in a non-secreting state. There was another prominent symptom in this, as well as in the following case, which I have not noticed in other cases of polypus uteri, and to which I wish to direct attention, viz., the copious watery discharge.

Case 2.—April 6th, 1849.—I was consulted by Mrs. O—, æt. 39, who says she has had thirteen children. The last was born in November, 1847. She was in labour about

twelve hours, and suffered more than she had done in either of her former labours. The placenta, which was retained longer than usual, was expelled naturally. She had a favorable recovery, and the usual discharge ceased by the end of the month. She remained free from any discharge for a month afterwards, it then returned for a few days. She was again free for three months, was well in health, and without pain. At the end of three months, and *five* from her confinement, she was again "unwell," and lost a good deal. She continued to flood more or less for a month or six weeks. She now consulted her surgeon, who prescribed some "strengthening medicine," and advised her to wean her child. After this she was much better and "regular," till November, 1848, when she was again attacked with flooding. Since November she had, constantly, some discharge, sometimes flooding for days together; at other times she has had a copious *watery* discharge, soaking many napkins in the day; she has suffered little or no pain, is very weak, and exsanguineous. Her lips are very pale; tongue pale and flabby; pulse quick and feeble. On making an examination, I found a large fleshy tumour completely filling the vagina; the os uteri situated high up, and tightly embracing the tumour. She had consulted an obstetric physician of some repute, who said it was a case of inversio uteri, and recommended that an attempt should be made to reduce it. The history of the case did not, I thought, warrant such a conclusion. The flooding did not occur until five months after her confinement, and there was no evidence to show that inversion had taken place. On passing the uterine sound, I found that the uterus was in its normal position, but the cavity elongated. With the sound in utero I could feel the fundus uteri above the pubes, and the point of the sound through the fundus. The result of the examination with the sound, therefore, decided the true character of the disease which, without the aid of that instrument, it would have been difficult to have done. In this and in Mrs. W—'s case, I found the use of Dr. Simpson's uterine sound of great value in assisting to form a correct diagnosis.

On May 4th, I applied a ligature to the tumour. The ligature was tightened twice a day, and, on the fourteenth day, May 18th, the tumour came away. It was the size of a goose's egg, and of a fibrous character. A few days before the tumour was cut through, there was an offensive discharge; this, however, was removed by the use of cold water injections, with the addition of a little yeast. After the removal of the tumour, there was an extensive ulceration of the anterior lip of the os uteri, and great relaxation of the vagina. The ulceration was cured by the occasional application of nitrate of silver, and the use of astringent injections; but it was not entirely healed till about eight weeks after the removal of the tumour. She gradually regained her health, and again became pregnant. She was confined 21st of March, 1850, had a very favorable labour, and a rapid recovery.

The following, although not a case of polypus uteri, I have thought might be associated with the preceding cases with advantage; 1st, because it had been, in the first instance, mistaken for polypus; 2dly, because it points out the necessity of attending to the history of each case, of ascertaining, where practicable, the date of its commencement, progress, &c.; and 3dly, as illustrating the importance of instrumental exploration, as an aid in arriving at a correct diagnosis.

Chronic Inversion of the Uterus.

Case 3.—December 13th, 1851.—Mrs. S— was admitted an in-patient of the Lying-in Hospital, under the care of Mr. Archer. She is forty-seven years of age, pale and anæmic. Her face œdematous. Has had only one child, a daughter, who is now twenty-six years of age. She says she was always "regular" and healthy before she became pregnant. She had a severe labour. The placenta was adherent. She suffered very much at the time it was removed, and was very ill afterwards; was unable to get

out of bed for a fortnight; suffered great pain, and had frequent vomiting. The flooding continued, more or less, for the month, and she was never entirely free from it during that time. She was able to get down stairs at the end of the month, but continued very weak after the first month; the flooding returned every fortnight, for two or three years; and she had, every now and then, attacks of pain in the belly, accompanied by vomiting. The discharge continued for a fortnight, and she lost a great deal each time. *After* the first two or three years, from the date of her confinement, the discharge did not return so often, but she lost a great deal at each period, and has never, up to the present time, been free from it for a month. She has been much worse again the last two years, frequently flooding, passing large clots, and the whole time troubled with a constant discharge, either bloody or coloured. At times it has been offensive, of late very generally so. During the last eight months she has had pains at the bottom of the back, and at the lower part of the belly; sometimes shooting through the pelvis and down the thighs. She has frequently felt a sensation of weight and bearing-down. She says she has never been in good health since her confinement; has always had some flooding after sexual intercourse, and at times suffered great pain. Bowels regular; no pain in passing her stools, nor in making water. Tongue clean; pulse quiet, but feeble. Sometimes she has had a good deal of pain at night, which has been relieved by taking ten drops of laudanum. *Examination per vaginam.*—A pear-shaped tumour is felt occupying the os uteri and the upper part of the vagina. It is tender or painful on pressure, about two inches long, rather smaller at the upper than at the lower part. It is completely encircled by the os uteri, and the tip of the finger cannot be passed any distance between the tumour and the cervix uteri, at any part of its circumference. The surface of the tumour is smooth and soft. The lip of the os uteri, on the left side, feels harder than natural, and fissured. The side of the vagina feels hardened; the hardness extending to the middle line

of the posterior surface, which feels irregular in that part, and ulcerated.

On examining with the speculum, the tumour appears like the inner surface of the uterus, its most dependent part being slightly abraded. There was some difficulty in obtaining a view of the side of the cervix uteri and vagina; but we partially succeeded and saw an ulcerated surface, which presented the appearance of a portion of the membrane having been cut out; its edge was thin, and had not the appearance of malignant ulceration. The uterine sound could not be passed up between the tumour and the cervix uteri, nor could the smallest bougie or probe be introduced at any part within the os uterus. Diagnosis, chronic inversion of the uterus, with ulceration of the mucous membrane of the vagina.

The increase of the symptoms during the last two years has been probably owing to that state of the ovarian and uterine system which precedes the final cessation of their functions; the accession of pain in the pelvis probably owing to the presence of the ulceration in the vagina. In this case the treatment was necessarily more of a negative than a positive character, and the immediate advantage to be gained by any treatment could be only limited. There was little hope that any attempt to reduce the inversion would be successful, from the long time it had existed, and the great probability of adhesions having taken place. Again, it was not thought justifiable to apply a ligature for the removal of the inverted uterus; 1st, because of the risk of such an operation; and 2dly, because, from her age, there was a probability of the early cessation of all activity in the reproductive organs, and that she might then no longer be troubled with the floodings.

She was ordered to be kept perfectly quiet, to take astringent tonics, and to use injections. After some weeks she left the hospital very much improved in health, and suffering much less from the discharge. I have since learnt that she died about two years after she left the hospital.

Polypus Uteri.

Case 4.—Sarah P—, æt. 52, came under my care as an out-patient of the Lying-in Hospital, in January, 1846. She had had twelve children; the last was born in 1838, which she suckled for some months. After weaning it, she menstruated regularly till 1844; she then became pregnant again, being at that time forty-nine years old, after an interval of six years, during which time she was in good health. She aborted at about the fourth month of gestation, after which she continued constantly "unwell" for two months, at times losing a great deal, now and then passing large coagula. She says she has never felt well since she miscarried. In 1845 she was attacked with frequent floodings, which continued for several days together, and returned nearly every fortnight.

In January, 1846, she was complaining of great debility, pelvic pains, and a sensation of weight; was pale, thirsty, her tongue furred, pulse quick and weak, and her appetite bad.

On making an external examination I found the uterus enlarged, and tender to the touch; there was also pain in the situation of the right ovary, increased by pressure.

Examination per vaginam.—Uterus enlarged, especially the fore part, and painful when pressed by the finger; the os uteri was small, the vagina hot, there was also a muco-purulent discharge, sometimes coloured, and now and then sanguineous. She was ordered to keep in bed, to have a few leeches applied to the right side, &c. She was very much relieved by the leeches, and for a short time was much better. The pain and febrile symptoms returned, several times, after longer or shorter intervals, and each time were removed by the application of a few leeches and a blister. June 10th, 1846, I have the following note: She is much worse, her general health bad, is pale and exsanguineous, has constantly a copious discharge, which is generally of a muco-purulent character, sometimes it is sanguineous, and at times offensive. She has frequent

attacks of acute pain, and gets very little sleep. The uterus is more enlarged, and rises above the pubes. It is felt externally as large as a cricket-ball. It passes down into, and occupies the fore part of, the vagina; is firm and tender to the touch. The os uteri is patulous, thrown backwards, and high up. There is no ulceration. She was ordered sedatives, tonics, &c.

She remained much the same, very ill, the whole of the summer, and was obliged to keep constantly in bed. She suffered much pain, and had constantly a copious discharge. In the autumn her health improved. She was frequently, for several days, without pain, and had very little discharge. She regained her strength, was able to walk out, and attended at the hospital for several weeks. The tumour appeared to be dormant, it remained *in statu quo*.

About Christmas she again fell off, suffered more pain, and had more discharge, frequently attacks of flooding. She was obliged to take opiates almost daily, astringents, and tonics.

Feb. 10th, 1847.—Something better, the external swelling rather less. She has less pain on examination. The discharge is more purulent. No part of the tumour has passed through the os uteri.

25th.—She has had a great deal of pain in the back and pelvis the last day or two, with some straining. To-day she has had some flooding, is much weaker, her legs and face are œdematous.

26th.—Passed a large quantity of coagula; great pain. To take Tannin, gr. vj., Pulv. Opii, gr. j., 4tis horis, from which medicine she has frequently derived great benefit.

March 4th.—Has continued much the same since the last report. Last night she had retention of urine, and was obliged to send for the resident surgeon to pass the catheter.

11th.—Worse; obliged to have the catheter passed two or three times a day. The discharge is copious and offensive. The tumour is felt externally above the pubes, rising about one third of the distance between the pubes, and the

umbilicus, is hard, circular, and circumscribed. There is no tenderness on pressure. On making a vaginal examination, I found that a large portion of the tumour had passed through the os uteri, and was occupying the greater part of the vagina. The vagina was tender and irritable, the examination giving pain. The os uteri out of reach, something like the margin of it is traceable at the upper part of the tumour, but it is felt indistinctly. The upper part of the tumour is large, and presents a broad basis. In consultation it was determined, that as she was so much reduced and weakened, and as the discharge was constant and copious, it would be advisable to put a ligature on the tumour without delay, for which purpose she was advised to become an in-patient of the hospital.

12.—She was admitted this morning; is excessively pale, and very faint from the exertion of coming into the hospital. Her pulse quick, and very feeble. She was ordered to take a little gruel with brandy, to have the bowels emptied by an enema, and to have the urine drawn off. This having been done, she was placed at the foot of the bed, opposite the window. I then, with Gooch's tubes, passed up some whipcord, previously soaked in oil, and having encircled the tumour, slipped up an instrument, made for the purpose, over the tubes. This instrument consists of a long stem, with an eye at the upper end, sufficiently large to slide easily over both the tubes of Gooch's canula, and having at its lower extremity a rack to tighten the ligature. I have found this instrument very useful where the polypoid tumour has been very large. Having passed the latter instrument, I withdrew the tubes, secured the ligature, and, by means of the rack, tightened it. She was then lifted into bed, and a pillow placed under the instrument to support it. She was ordered to take at once forty minims of laudanum, to have gruel, arrowroot, &c., from time to time. The catheter to be passed three times a day.

March 19th.—She has gone on comfortably, the discharge has been much less, and she has improved a little in health: a large portion of the tumour came away to-day. It has

many sinuses passing into its substance, which are seen best from the cut surface. The ligature is not come away.

25th.—Not so well. Has been troubled with diarrhœa for two or three days; pulse 120. The ligature is not come away. I have tightened it daily, and have pulled rather strongly at it, but it seems quite firm. Prescribed decoction of logwood and laudanum every four hours. Milk diet, with a little brandy.

27th.—Better, less purged. The ligature came away to-day, with a small portion of the tumour attached to it, about the size of a walnut. The swelling has disappeared from the pubic region.

Examination with the speculum.—There is no portion of the tumour visible, the mucous membrane of the upper part of the vagina is abraded, probably from the long continued pressure of the instrument. To continue the mixture, &c., and to have the vagina syringed with tepid water three or four times a day.

30th.—Better.

April 3d.—Improving; appetite good, rests well, scarcely any discharge. Examination per vaginam.—Os uteri natural, no enlargement, nor any portion of tumour to be felt. Her pulse is stronger and less frequent. Her complexion is also improving. To have a mutton chop for dinner, and to take a tonic mixture.

13th.—Still improving.

27th.—Not so well, purged frequently, complaining of sharp pain in the right ovary, which is enlarged and painful on pressure. No enlargement of the uterus, no discharge. Prescribed mustard poultice over the seat of pain, and an anodyne astringent mixture.

29th.—Better.

May 4th.—Not so well; more pain in the right iliac region, and frequent attacks of diarrhœa. Micturition painful. Prescribed a liniment of belladonna to the side, liquor potassæ, sedatives, &c.

6th.—Better; the pain gone.

10th.—Has had a return of pain in the right side, with

some flooding. Ordered infusion of roses with laudanum every four hours.

11th.—Better; discharge ceased.

13th.—Not so well, diarrhœa; has passed some coagula per vaginam; pain in the left iliac fossa shooting upwards; great soreness of the whole lower half of the belly, dulness on percussion on the left side of the abdomen. There is slight fulness on that side. Prescribed a blister to the left side; decoction of logwood and opium.

15th.—Much better, no pain; very weak. Prescribed tincture of iron, and quinine, three times a day.

20th.—Very much better, is sitting up and sewing.

July 27th.—Quite well. I had an opportunity of seeing this patient two years afterwards, and am able to report that she continued in good health.

This case illustrates two points; first, that fibrous tumours of the uterus will sometimes become polypoid, being expelled, or partly so, from the cavity of the uterus, so as to admit of their removal by ligature; and secondly, as taught by the late Dr. Gooch, where the tumour is so large that it cannot be entirely included in the ligature, the remaining portion will, *generally*, undergo a process of decomposition and come away with the discharges.

Polypoid tumour of the uterus.

Case 5.—Miss F—, æt. 32, fair complexion, thin, and rather above the middle height, consulted me in September, 1839. She said she began to get out of health early in the summer of 1838. She was at first more frequently "unwell" than usual, continued so longer, and lost more at each "period," and frequently passing coagula. When I first saw her, she was weak and debilitated, had frequent attacks of menorrhagia, and at other times leucorrhœa. Sometimes she suffered from pains in the pelvis. At that time there was no appreciable enlargement of the uterus. Under the use of tonics, astringents, &c., with rest, she improved in

health, the floodings were less frequent, and the amount lost considerably less. About Christmas 1839, I ascertained that there was enlargement of the uterus, probably from the pressure of a polypus, or a fibrous tumour.

She continued much the same, the uterus gradually increasing in size. The os uteri underwent very little change for three or four months, it then gradually opened and allowed the tumour to pass through into the vagina.

July 15th, 1840.—The tumour occupies the whole of the vagina. I now passed a ligature, consisting of whipcord, previously soaked in cold drawn linseed oil, round the upper part of the tumour, as high up as I could reach, taking care not to include any portion of the os uteri, and, at first, tightening it slowly until I was satisfied that the ligature did not include any portion of the uterus. The ligature was tightened every night and morning, and came away on the eleventh day, July 26th. It was necessary to pass the catheter at each visit. The portion of the tumour, which weighed sixteen ounces, was extracted with great difficulty. She was very much relieved by the operation, the discharge very much diminished, and her health gradually improved. It soon became evident, however, that there was a large portion of the tumour remaining in utero, much too large to encourage the hope that absorption would be able to complete the cure. There was also felt, on the right side of the uterus, a little below the fundus, a small tumour in the walls of the uterus, standing out, as it were, in bold relief, circumscribed, and separate from the general uterine swelling. After a short interval, the discharge increased, and her general health again began to suffer. The tumour gradually descended, and once more occupied the vagina.

A second ligature was applied September 3d, 1840, and came away on the 14th, the eleventh day after its application; the tumour removed this time weighed twenty ounces. and was more troublesome to get away than the last. I was obliged to use small forceps to extract it. She was very ill all the time the ligature was on, suffered much pain, cramps in her thighs and legs, retention of urine, restless-

ness, &c. About the third day after the ligature came away she had rigors, followed by phlebitis of the left thigh and leg, of a very severe character. As the left limb got better, the right thigh became affected in the same way, but in a slighter degree. After long suffering, and great risk, she gradually recovered. On making an examination per vaginam, about three months after the last operation, we could discover no enlargement of the uterus, the vagina was healthy, the os uteri a little open, so as to admit the end of the finger; on the inner surface of the cervix, posteriorly, was felt a small rough surface. On making an external examination, the uterus was found to have contracted, and sunk behind the pubes—in fact, could scarcely be felt. The tumour in the walls of the right side of the uterus was still to be felt, but less distinctly, and it was smaller in size.

She regained her health and strength, and was able to walk three or four miles. She continued well for twelve months, her appetite was good, and she gained flesh. She had little or no discharge, and menstruated regularly. At the end of twelve months she had a return of the leucorrhœal discharge, and, occasionally, floodings. She again increased in size, and the uterus enlarged rapidly. In two years from the date of the last operation, she was as large as a woman seven or eight months advanced in pregnancy. The small lateral tumour, before spoken of, remained *in statu quo*. She had an attack of inflammation in the tumour or in the uterus, accompanied by severe feverish symptoms, sickness, acute pain in different parts of the swelling, with great tenderness on pressure, frequently violent strainings, and retention of urine.

These symptoms were relieved, and shortly afterwards, viz., December 3d, 1842, there was some decomposition of the tumour; the discharge which had been for some time constant and copious, now became exceedingly offensive, so much so that the smell was perceived the moment of entering the house. At this time the uterus was low down in the pelvis, the os open, and a small portion of the tumour passing through it, but not sufficient to require the appli-

cation of the ligature. We were in hopes that a spontaneous cure might have taken place, but in this we were disappointed. Portions of the tumour from time to time came away in a decomposed state, sometimes pieces as large as a pigeon's egg. The bulk of the tumour, however, did not appear to diminish. In January, 1843, she was much distressed from the pressure of the tumour on the bladder, which caused retention of urine.

The tumour gradually occupied the vagina, and on February 6th, 1843, the ligature was applied for the third time. It came away February 19th; but on this occasion the tumour, below the ligature, was decomposed and shrivelled, so that when it came away it was a mere shred, and not a large fleshy mass as on the two former occasions. She was partially relieved only by the last operation. The discharge continued, her health remained impaired and her appetite bad. Pieces of the tumour came away, at different times, in a decomposed state.

December 8th, 1843.—I have the following note. Saw her in consultation with Dr. Ingleby. The enlarged uterus reaches a little above the umbilicus, occupying the pelvis, and nearly touching the perinæum, pressing against the rectum behind, and the bladder before; the os uteri cannot be felt, the lower part of the tumour is cleft. There is pain and tenderness over the abdomen, she is sick and feverish, her pulse quick, tongue red and chapped.

December 12th.—She has been much worse the last two days, has had violent straining, is very feverish, low and depressed, at times delirious, and restless, her pulse 120, and very weak. Ordered effervescing mixture and an opiate at night.

14th.—Something better, pulse 100, tongue swollen and chapped, abdomen less tender and less distended.

20th.—She has had an attack of flooding, which was copious, but did not continue long. For some weeks after this date she was better.

February 7th, 1844.—Better; tongue resuming its natural appearance; pulse 90; she feels better and stronger.

28th.—Better in health, the discharge is less, and has

lost its offensive character; the process of decomposition appears to have stopped; the tumour is larger, reaching as high as the gravid uterus at the eighth month; a large mass occupies and distends the vagina; during the following month she improved, and was able to sit up again; she continued much the same till the end of the year.

January 5th, 1845.—She is getting weaker and thinner, gets very little sleep, and is desponding; the discharge very great and offensive; the swelling now reaches to the centre of the epigastrium; the umbilicus is level with but not raised above the skin.

7th.—A small part of the tumour has been expelled.

9th.—Has had expulsive pains, and a piece of the tumour, weighing *six ounces*, has been expelled.

10th.—The external parts are sore and partly abraded, the vagina filled by the tumour; the size and condition of the abdomen the same.

21st.—Better.

April 13th.—Has been better since last report; yesterday she rode out to visit a friend, and was not so well last night; to-day she has had an attack of violent pain, vomiting, and retention of urine; the size of the tumour about the same.

15th.—Severe hæmorrhage.

17th.—Better.

20th.—More comfortable.

October 2d.—Has been better in health, had less discharge, and suffered less from the tumour since the last report, until a few days ago, when her sufferings again increased; the tumour reaches nearly to the ensiform cartilage, pressing against the liver and diaphragm, interfering with respiration, filling the vagina, and pressing upon the perinæum; she has lately had frequent attacks of severe expulsive pains and retention of urine, vomiting, &c.; she was relieved by opiates and prussic acid taken in an effervescing mixture.

25th.—Much better, and downstairs; she is taking no medicine.

January, 1846.—From the date of the last report she continued much the same for some weeks, at times suffering

from expulsive pains, retention of urine, and inflammation of the tumour. The size of the swelling varied considerably; at one time it diminished very much from decomposition, which continued for several weeks together, accompanied by an offensive discharge and by the frequent expulsion of pieces of the tumour, as had occurred on former occasions.

February.—She has been getting larger again, the process of decomposition has ceased, and she has had lately two or three attacks of bearing-down pains, retention of urine, &c. During these expulsive efforts, the tumour was gradually forced down, until a large portion of it was external, and remained permanently so, distressing her so much that she now requested I would remove as much of it as I could. She had repeatedly declared she would not submit to another operation.

March 7th.—I applied a ligature upon the tumour as high as I could reach, but it so completely filled the vagina that it was not possible to apply it higher than the entrance to the vagina; the part was separated, and came away with the ligature. It weighed one pound and a quarter.

14th.—Better.

25th.—Better. From this date she gradually improved, her appetite was better, she was much smaller, had less discharge, and was able to walk out; her health greatly improved till the beginning of 1847; she then began to get worse, had more discharge, one or two attacks of flooding, got larger again, and had two or three severe attacks of bearing-down pains, for which she was obliged to take opiates.

May 5th, 1847.—She has been more comfortable lately, but is very large again, and the tumour low down; at times a large part of it is forced externally, but as she is freer from pain and better in health, she will not consent to have it removed; the outer surface, to the depth of a shilling in thickness, becomes perfectly white, and peels off every two or three days; if any attempt be made to detach it, or to cut or tear through the outer covering, then the tumour bleeds.

May 24th, 1847.—The tumour has been lower down the

last ten days, and a large piece constantly external; she has been obliged to keep her bed, and has been so much harassed by the pressure of the tumour that she wished to have a part removed; I immediately applied a ligature; the mass included was separated in a few days.

She continued much the same during the remainder of 1847 and 1848, varying in size; at times suffering much, then relieved by the mass of disease undergoing some spontaneous change, by which large pieces were expelled; at times she was obliged to seek relief by the application of the ligature, she would then rally, and be able to get about for a short time. In the early part of 1849 she got permanently worse; she was *larger* than a woman at the full period of pregnancy, was much distressed by the great distension, and complained that she constantly felt as if she should burst; the integuments of the abdomen were so tight that the skin in two or three places was cracked, and the whole surface of the abdomen was covered by large veins, passing in different directions; the enlargement now remained permanent; she had frequent attacks of sickness, a troublesome cough, and aphthous state of the mouth and throat, and constant restlessness; she died the end of May, 1849, nearly ten years from the time she first consulted me. I was much disappointed that I was unable to obtain permission to make a post-mortem examination.

In this and the following case, we have instances of the *reproduction* of the disease to such an extent as to defy all treatment, and ultimately to prove fatal. Although I believe this was a true fibrous growth, its rapid development, time after time, would almost lead to the belief that it was a low form of malignant disease. They are the only cases of the kind that I have met with.

Case 6.—The patient was a maiden lady, 38 years of age at the time of her death; she was a patient of my brother's, to whom I am indebted for the following notes. He says: I first saw her on the 22d of April, 1856, in consequence of sudden and alarming hæmorrhage; she had,

for months previously been subject to frequent attacks of hæmorrhage, occasionally severe. Suspecting the existence of polypus, I made an examination, and found a fleshy tumour, as large as the fist, protruding through the os externum, firm in texture, insensible to the touch, of a whitish colour, with large and tortuous veins traversing its surface; it was somewhat contracted above, extending beyond the reach of the finger, notwithstanding the relaxed and dilated state of the vagina; it appeared to be prolonged upwards, in a cylindrical form, to be seven or eight inches long, and as thick as the wrist, its attachment could not be ascertained; the patient states that the tumour had existed about eight or ten years, and that it suddenly protruded during some bodily exertion. She had previously been subject to a watery discharge occasionally. The catamenial discharge was irregular, sometimes profuse. She had, on several occasions, been under professional attendance, and during the past year, for a period of six months. She obtained partial relief, but had never mentioned the existence of the tumour, which was known only to herself until I saw her. The hæmorrhage returned to an alarming extent, she became quite blanched, had frequent attacks of syncope, and was distressed with vomiting; the legs were œdematous, and her general aspect was more that of a marble or wax figure than of the living body.

On the 28th of April a ligature was applied as high up on the tumour as I could reach. It came away at the end of a fortnight. The tumour did not separate at the point of strangulation by the ligature, but about two inches higher up, leaving a tufted extremity above the ligature about the size of a small orange. No hæmorrhage occurred after the application of the ligature, and the patient gradually recovered. On making an examination, per vaginam, some days after the removal of the tumour, a portion could be felt still occupying the upper part of the vagina; but its size or connections, or state of the os uteri, could not be ascertained. My attendance ceased at the end of July.

In the middle of November I was requested to visit her, in consequence of a return of hæmorrhage. She would not submit to an examination. She was relieved by the ordinary means.

At the end of March, 1858, I received an urgent request to visit her. She was then suffering great pain, of an intermitting character, resembling labour, a profuse and very offensive discharge issued from the vagina, and a tumour, the size of a goose egg, of a livid appearance, highly vascular, and, in parts, of a dusky-red colour, as if from extravasated blood, protruded through the os externum. On the following day, March 27th, she was admitted into the Lying-in Hospital, under the care of Mr. Archer. She was then exceedingly pale; her skin hot and dry, and pulse very quick. The tumour filled the vagina and pelvis, pressed upon the urethra, pushing up the bladder, and causing retention of urine; and a mass, the size of a child's head, protruded from the vagina. A catheter was with difficulty introduced and left in the bladder. A ligature was on the same day applied to the upper part of the tumour, and another still higher on the 29th. No hæmorrhage occurred after the application of the ligature, and for a short time the constitutional irritation appeared diminished; but, on the 30th, sickness came on, and she rapidly sunk, and died on the 31st.

Post-mortem.—The pedicle of the tumour was of such a firm consistence, that the ligature had not cut through it at all. It was found to grow from the external part of the os uteri. The internal surface of the neck and fundus uteri were free from the appearance of disease, with the exception of slight congestion. A section was made of the mass which was found to be very vascular, and made up of fibrous tissue and fibro-plastic cells in various stages of development. The right ovary was healthy. The left contained cysts. The viscera, generally, were healthy. Adhesions had taken place between the tumour and the upper and lower part of the vagina. The preparation has been preserved in the museum of the Sydenham College.

I venture to add to the series the following case of polypus uteri, which has occurred since the above paper was read.

Case 7.—An unmarried lady, about thirty years of age, consulted me. She said she had suffered from hæmorrhage for twelve months. On making an examination, I found a small tumour the size of an acorn protruding through the os uteri; the lips thin; neck enlarged; vagina small. Two days after, whilst at the water-closet, she had a forcing down. The next day I made another examination. The tumour was then the size of a hen's egg. She had frequent expulsive pains. Three days later I surrounded the tumour with a ligature by Gooch's canula, and, in consequence of the unyielding state of the vagina, I had some difficulty in applying the ligature. For several hours she was easy and comfortable, but, during the night, she became restless, and suffered great pain. Early the following morning I was sent for. She appeared to be in great pain. She had changed her position, was lying on the back, and had moved the instrument, so that it was pressing against the neck of the bladder, instead of being at the side of the pelvis. Under all circumstances, I thought it better to remove the ligature, and to wait a few days. She was an excitable hysterical lady. For several days she complained of a great deal of pain, and was obliged to take an opiate at night. On the seventh day, after the removal of the ligature, she had a severe expulsive pain, which forced a large portion of the tumour externally. It was now determined to remove the polypus by the écraseur, and, as I was too ill at the time to take the sole management of the case, I was assisted by my colleagues, Mr. Archer and Mr. Orford. The tumour was very successfully removed. It weighed about eight ounces. The patient was soon well; and, in three weeks, returned home, as considerable distance. I examined the uterus before she left. It was healthy—the os nearly closed, and free from ulceration.

A CASE

OF

INFANTILE SYPHILIS,

WITH REMARKS.

BY

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Read June 1st, 1859.

Amongst the diseases which may be propagated from parent to offspring, few are more disastrous in their results than constitutional syphilis. It is probable that the syphilitic poison is the direct cause of the greatest number of abortions and premature labours which occur in the present day; and that even when it fails to destroy fœtal life at an early period of gestation, it induces other severe disorders, having a fatal tendency at a more or less remote period. The following case is thought worthy of the attention of the Fellows of this Society, since it serves to prove the truth of those observations in rather a striking manner.

On the 26th of March, 1858, I was consulted, for the first time, by a married lady, twenty-seven years of age, in bad health, and rather more than two months advanced in her seventh pregnancy. The history of her case was obtained partly from herself, and subsequently from her husband. At the time of marriage she was in the enjoyment of excellent health, and continued to be so until several months after the birth of her first child. This event took place on the 27th of August, 1851; the child was strong and hearty, and the mother was able to suckle him; he throve well, and is now alive and in good health. In the month of February, 1852, the

husband contracted a syphilitic sore from a prostitute; for the treatment of which he put himself under the care of an eminent surgeon. He was profusely salivated, and the chancre quickly healed; but two months afterwards he had secondary symptoms, for which, he tells me, he again took mercury. He recovered soon; but being nervous as to the consequences, he did not have connexion with his wife from the date of his being primarily affected, until the following November, when he seemed to be quite free from the slightest symptom of any syphilitic taint.

About March, 1853, the wife's general health began to be affected, though not very materially; and she remembers that she suffered particularly from a cutaneous eruption resembling a number of small boils. Three months afterwards—that is to say, on the 12th of June—she was delivered, at the seventh month of gestation, of a still-born child. At the commencement of the following year, her health began more decidedly to fail; numerous spots appeared on her skin; she had a sore tongue; an ulcer on her lip; a "relaxed throat;" and her hair commenced falling off. She is quite certain that neither at this date, nor at any other period, did she ever have any sore on the genital organs. On the 20th of May, 1854, she gave birth to her third child: it was dead; and she fancies she had not gone more than six months and a half with it. In the November of the same year she aborted at the third month. In August, 1855, she had a child born dead at the sixth month; and in October, 1856, she was delivered at the eighth month of pregnancy of another dead child.

As before mentioned, she applied to me in March, 1858; and though there was nothing to guide the physician in the diagnosis but her own imperfect statements, there appeared to be no great difficulty in forming a correct opinion upon the nature of the case.

The prominent symptoms were depression of spirits, and general debility; an abundant yellow leucorrhœal discharge; and a continued falling off of the hair. On making a vaginal examination, the labia uteri were found enlarged,

indurated, and morbidly sensitive to the touch; there was also abrasion of the mucous surface around the os. The lady was ordered the Liquor Hydrargyri Bichloridi; of which she took three drachms daily for upwards of three months. Under this treatment, with attention to the diet, &c., she appeared to be gradually restored to health; strength being gained, the feeling of mental depression removed, and the vaginal discharge ceasing. About the commencement of August, all medical treatment was discontinued; and she continued to enjoy unusually good health until the 24th of September, when labour set in, and I delivered her of a female child, which she had carried for rather more than eight months. The infant, though small, was apparently healthy, and continued so for a fortnight, sucking heartily at the mother's breast, and sleeping well. On the 7th of October, however, a small boil began to form on the side of the neck; and two days afterwards it was noticed that the child had the "snuffles," and that the palms of its hands and the soles of its feet were dry, and becoming scaly. On the following morning, an eruption began to appear round the mouth and anus; and, in short, it became evident that the child was afflicted with constitutional syphilis. This condition was treated by inunction with mercurial ointment; ten grains being gently rubbed over the abdomen night and morning. No medicine of any kind was given by the mouth. By the end of October the child seemed perfectly well; and my attendance on it then ceased. On the 12th of November the mother called on me to show how well she and her infant remained, and she brought the latter with her in a close carriage, which was warm. On entering my waiting-room the infant looked strong and healthy, but in a few minutes it seemed to lose all colour, and at once died without a struggle. I saw her immediately, but the heart's action had ceased. On the following day an examination of the body was made, when every organ was found healthy; the brain, lungs, thymus gland, heart, trachea, mouth, pharynx, stomach and intestines, all presenting a perfectly natural appearance, and

being free even from any congestion. The only change to be discovered was in the blood; which seemed to be more watery than natural, and, examined microscopically, to contain an excess of white corpuscles.

On explaining my opinion of the case to the husband, he gave the information which has been incorporated in the foregoing details. At the same time he stated that he was in good health, with the exception of not being very strong, and feeling more nervous than he should do. His skin was everywhere clear, except on the left buttock, where there was a small patch of psoriasis, with which he had been annoyed for many months. He readily consented to take the bichloride of mercury for several weeks; and as he has now perseveringly done so, it is to be hoped that he is really as healthy as he appears to be.

The chief remarks which this history suggests, seem to be briefly these:—The father begot syphilitic children, who propagated the poison to the mother. With each successive pregnancy, the mother's health deteriorated, for on each occasion she received, as it were, a fresh charge of the poison from the ovum, which was added to that already accumulated in her system. The syphilitic conceptions were six in number: the six children were all born prematurely, five of them were born dead, and the sixth, though apparently healthy at birth, soon manifested symptoms indicative of the morbid condition of its blood, and died suddenly after an imperfect cure before it was two months old. It must not be overlooked that, prior to the father's infection, the mother was delivered at the proper period of gestation, of a child which has always been healthy; so that it may justly be inferred, that the six lives were sacrificed owing to the influence of the venereal taint, and to it alone. One or two practical points also which deserve consideration are these:—Would the last infected infant have had a better chance of living, if the mother had continued taking the bichloride of mercury after she was seemingly well, and until the date of her labour; or would it have been better to have continued the mercurial inunction for a longer time with the

infant itself; or ought the child to have been suckled by a healthy wet-nurse, instead of the attempt to rear it being made by the mother? In a somewhat similar case which has since occurred in my practice, the infant was weaned at the same time that the venereal symptoms appeared and that the mercurial inunction was commenced; and so far the result has been satisfactory, the child being now six months old and remarkably strong and healthy.

Cases of sudden death in infants from syphilitic contamination, when such infants are apparently free from disease, are not common. Indeed the only recorded case with which I am acquainted, is one related by old Richard Wiseman, who was Serjeant-chirurgeon to King Charles the Second. This author says,—"A lusty young fellow brought me to see his wife, which I did in the company of Dr. Mapletoft. We found upon her face a great cluster of round, crusty, venereal ulcers, yet not only her husband was seemingly sound, but her child also, being half a year old, appeared lusty and strong, played merrily in the nurse's arms; but that day it dyed suddenly: nor could I impute that accident to any other cause but the forementioned infection."—It may be a question whether the syphilitic poison, by its effect upon the blood, has a direct influence in destroying life, *per se*, in these cases; or whether it merely acts indirectly by increasing the constitutional feebleness of early life. My own opinion, however, is in favour of the first view.

A CASE OF SUPPOSED
INVAGINATION OF THE INTESTINE,
IN A CHILD AGED TWENTY MONTHS,
SUCCESSFULLY TREATED.

BY

THOMAS BALLARD, M.R.C.S. Eng., and L.S.A.

Read June 1st, 1859.

In the month of January last, I read a paper before the Harveian Society, on "A New Theory of the Cause of some of the Diseases of Infants and the Puerperal State," in which I endeavoured to prove that the exercise of the instinctive act of sucking under circumstances unfavorable to the infant obtaining the food for which its system craves, is a principal source of disease to infants and puerperal women. The basis of my argument was the physiological fact announced by Dr. Brown-Séquard, "That the excitation of the nerves of taste produces an abundant reflex secretion of gastric juice, and also a flow of bile and pancreatic juice in the bowels." I suggested that the act of sucking was, "par excellence," the mode to excite the nerves of taste, and thus to induce the excessive reflex secretion of gastric juice, which not meeting with a proportionate supply of food whereon to expend its solvent powers, acts upon the mucous coat of the intestinal canal, and causes various degrees of injury thereto; the frequent, loose, and green stools of infants being evidence of this process being in operation; and I brought before the notice of the Society the notes of many cases illustrating the fact, that the intestinal disorders to which sucking infants are so liable, are really caused by *fruitless*, and consequently *forcible* and

prolonged acts of sucking, and, moreover, that these diseases are speedily and effectually cured by merely taking care that the infant does not suck in vain.

Among the cases which I then narrated in support of the views I had advanced, was the following one of "invagination of the small and large intestine," which had terminated fatally. A female infant, aged six months, who was fed entirely at the breast, and constantly had frequent and green stools, was seized on December 31st, 1856, with severe illness. She appeared to be suffering much abdominal pain, and had a sanguineous discharge per anum. She remained very ill—bloody mucus continuing to be discharged, but no fæces—until January 4th, 1857, when she died rather suddenly. The autopsy revealed extensive invagination of the small and large intestine, the volvulus presenting almost at the anus. The posterior wall of the large end of the stomach was perforated by a large opening, the walls were in the state of gelatiniform softening, the contents of the stomach had escaped into the abdominal cavity, and there was a very strong odour of gastric juice; the walls of the intestines were thin.

At the time this case occurred I had not recognised "fruitless sucking" to be the cause of infantile intestinal disease; but when I became aware of this fact, it was obvious that this was a case illustrative of it. The small intestine was thrown into a state of irritation by the cathartic action of an abundant secretion of gastric juice, and the invagination resulted; the sucking being continued, the volvulus necessarily increased; and inasmuch as there was no escape for the secreted juices, they remained in the stomach, and completed the work of solution on the posterior wall of that viscus.

Recently, another case of invagination has occurred in my practice, caused, as I believed, by the act of sucking. I had the satisfaction of conducting the case to a successful issue.

A little girl, æt. twenty months, who had always enjoyed good health, and had not suffered from diarrhœa, had cut

nearly all her teeth, and ate heartily, but was allowed to suck the breast during the night, was seized, on January 20th, 1859, with severe abdominal pain, which recurred in paroxysms; no stool passed until the following day, then there were three evacuations, consisting almost entirely of blood, no solid fæces. I was then consulted, and at once ordered the suckling to be discontinued, and every four hours a small dose of chalk mixture with opium to be administered.

22d.—She has not slept, has had several attacks of pain, with which she appears to be faint; no more evacuation. Mr. Athol Johnson saw the case with me, and agreed as to the diagnosis. We discussed the propriety of opening the abdomen, with the view of restoring the intestine to its normal position, but decided against the operation. A copious enema of gruel and oil was employed with the intention of forcing back the volvulus, which could not be felt by the finger. The bowel was likewise frequently and vigorously inflated by means of an india-rubber pump.

23d.—Pain returns at intervals. Half a pint of gruel was used as an enema; some time after which a piece of fæces passed of an imperfectly cylindrical form, and having a coating of blood; the fluid of the enema was returned blood-stained.

The following day the pains recurred, without further relief of the bowels; no volvulus or tumour could be detected per anum; recti muscles rigid, the patient cheerful between the pains.

25th.—There have been many paroxysms of pain; has passed portion of fæces the size of a hazel-nut, coated with blood; a some more fæces are felt in the rectum, and ermoved by the finger; they are all stained with blood. 12, p.m.—Has had several severe paroxysms; she cries and screams during them; nothing more from bowels; takes very little milk and water, but the pain succeeds immediately after taking any.

To take every four hours a quarter of a grain of calomel and the same quantity of powdered opium.

26th.—Has been quite easy since taking the pills; no desire for stool.

27th.—Slept well; some fæces passed, each piece stained with blood. Since the stool, has had two attacks of pain, less severe than before.

28th.—Has had no pill since last night, several attacks of pain to-day; a cylinder of fæces passed slightly tinged with blood. To continue the pills.

29th.—One stool rather loose, some pains, but less severe. To have a little veal broth, in addition to the milk and water.

30th.—Very loose stools, no blood in them; passed a good night; had only a few trifling pains, some more severe this morning, one very bad just before a motion, which was ejected with great force. Has taken sixteen pills. To continue the pills every six hours, omitting the calomel.

31st.—Much less pain, though the paroxysms return at intervals they are less severe than before. A little solid fæces passed, no blood. She has become very thin.

February 2d.—One stool, consisting of solid and loose portions, mixed with many masses of stringy mucus and a little blood; had pain before it passed. She appears much better, and has asked for food for the first time. Had one stool yesterday, ejected with great force.

4th.—No stool yesterday, but had a severe paroxysm of pain, and one to-day; no stool until my visit, when I injected some water, and obtained a solid stool: no blood or mucus.

10th.—Three stools quite natural, no pains, appetite ravenous, is cheerful, and appears to be quite well. She has since regained her flesh, and continued well, except on one occasion early in March, when after eating freely of orange, she had diarrhœa; the stools were again ejected with great force, and she complained of "pain in the belly" as before, at the same time looking ill and distressed. She took a few more opium pills, and in two days was quite recovered.

I think there can be no doubt that this was a case of invagination of the intestine, the progress of which was arrested by the combined effects of the opium and of the discontinuing the suckling; and, although the bowel may not have returned at once to its normal position, yet there seems every reason to hope that the child may not suffer much in consequence. The relapse of the symptoms in March lead to the inference that the invagination was not then quite reduced.

I have been induced to submit this case to the notice of the Society, because the view I entertain of the exciting cause of the disease is novel, yet, I believe, one of very great importance; and it appears to afford a good illustration of its successful application. Had this child continued to suck, which under ordinary circumstances she would have done (it being the common practice not to remove a child from the breast when it is ill), in all probability she would have died in four days, that being the period of duration of the disease in the majority of the recorded fatal cases I have met with.

THE MORE FREQUENT
USE OF THE FORCEPS
AS A MEANS OF LESSENING BOTH
MATERNAL AND FŒTAL MORTALITY.

BY

PHILIP H. HARPER, F.R.C.S. (BY EXAM.)

Read June 1st, 1859.

[THAT a right value may be attached to the deductions made in the following paper, it may be advisable to make a few preliminary observations. My experience extends over twenty-one years, from 1837 to 1858 inclusive. The record of cases includes all those attended by myself, by the assistants living in my own house, and also by the assistant at a branch surgery, situated two miles from my private residence. It need scarcely be added, that these gentlemen were required in every case, to act according to my directions; and upon the least delay or difficulty of any kind, to send at once for me. The cases which are spoken of as consultation cases, were those in which I was sent for by a professional brother, or by midwives; in the large majority by the latter. There were three midwives in the neighbourhood, who were in the habit of sending for me in every case of difficulty and emergency (one of whom attended upwards of 300 women a year); and as I never refused to go, they availed themselves of my services very frequently.

The classes of persons in whom the cases occurred were two. Those cases occurring during the first few years were amongst persons engaged in agriculture and its kindred pursuits. Those occurring during the last three fourths of

the period were inhabitants of a town, and mining district. A large proportion, therefore, were necessarily engaged in the usual laborious employments peculiar to such districts. It may be mentioned as a peculiarity among the latter cases, that the proportion of children exceeding the average size, at birth, as well as the proportion of masculine pelves, were above the usual average. It should also be borne in mind, that from inordinate muscular exertion and free use of stimulants, there were a large number of cases presenting some abnormal modifications of uterine contraction.

With regard to the number attended in a given time, and therefore under the same electrical and atmospherical influences, it was very various. We have attended eight in twenty-four hours, twenty-seven in a week, and sixty-five in a month. Twenty cases a week was of comparatively frequent occurrence.

At another period I hope to lay before the profession some curious as well as important points I have met with.]

INTRODUCTORY.

The great object of all obstetric art is the preservation of the lives of both mother and child. It is self evident therefore, that the more lives we save, the nearer our practice approaches to perfection. It is not enough that we save the mother at the expense of the child, or *vice versâ*, the child to the hurt of the mother. We may certainly, from a variety of circumstances, be called upon to sacrifice one; and then the life of the child must be considered as that of the least moment; but we should always consider this, as the greatest misfortune which can happen in our practice. Furthermore, the saving of life is not the only point which we have to aim at. We are to leave the mother, as well as the infant, in a state of sound health. Our work does not cease with the termination of the parturient effort. If the maternal system have become exhausted by the length of time the labour has lasted; if, for many weeks it hovers

between life and death, and the system remains shattered or broken for many months, then the case is an unsatisfactory one, and a reflection upon our treatment. As the end is the saving of both lives, so it is equally important, that the mother should be able to resume her duties with comfort, and in health. Our twofold motto must ever be—Save both lives, and leave the mother healthy and well after a moderate time.

As one among other means which may conduce to this end, I hope to show that the more frequent, and much earlier use of the forceps holds a high rank; and, I would ask for the calm and candid consideration of the fellows of the Society whilst endeavouring to lay before them the train of reasoning, which has induced me to adopt, and carry into bedside practice, this view.

In order to render my argument complete, and to set forth all the points which are necessary to guide us to a just and fair conclusion, it will be necessary to mention many facts, with which all are more or less well acquainted. When this is the case, I must request your kind forbearance, on account of the vast importance of the question, and my anxious desire to omit no single thing, which can conduce in any way to the noblest end of our profession—the saving of the lives of our fellow-creatures.

Section I.

What are the ill effects produced upon the mother, either locally or generally, by the use of the forceps?

If we examine almost any of the obstetric works which have been written by our great authorities, we find them expressing, in more or less strong terms, the dangerous effects produced upon the mother by the use of the forceps. The authors refer us to statistical tables, which show that a certain per-centage of women die after forceps deliveries, and it is thence inferred that these deaths are caused by their application. Thus, not considering with due regard to facts, that in many, if not all of the deaths, it is

the state into which the woman has passed before their use which is the real cause of death, and that a large proportion of them would have occurred whether the forceps had been applied or not.

The local injuries to the mother which are said to be caused by the forceps are laceration of the uterus, tearing of the os uteri, rupture of the vagina by passing one or both blades externally, so as to grasp the walls of the uterus instead of the child, vesico-vaginal fistula, recto-vaginal fistula, rupture of the perineum. Their forcible introduction may bruise the uterus and lead to inflammation, with its results. It may also give rise to violent neuralgic pains in the legs, more or less permanent, from slight injury caused to the larger nerves by the pressure of an improperly made instrument.

Is there a single one of these terrible effects which can be considered a necessary sequence of the use of the forceps? Do they not constantly occur after tedious labour where no instruments of any kind are used? In the course of this paper the inquiry will be made whether the forceps would not prevent instead of causing them. With respect to the three first, it is quite certain that nothing but gross ignorance and abuse could produce them. There is a case mentioned by Ingleby, and often referred to, "where a practitioner made a violent effort to extract the head with a long pair of forceps, permitted the blades to slip off—and such was the extent of the mischief, that the whole circle of the vaginal part of the uterus sloughed away, together with a considerable portion of the posterior surface of the bladder, an incurable vaginal fistula being the result." Allowing that the mischief in this case was caused by the forceps, we may ask whether it ought not to be attributed to their abuse? Ought they to slip? Ought they so to draw upon the neck of the uterus as to bruise it?

Many cases of sloughing away of the whole circumference of the neck of the uterus have been reported, and in the majority no instruments have been used. Mr. Scott's case

may be mentioned as a type, because you are well acquainted with it; and there are many similar on record. To reason that such effects are the necessary concomitants of the forceps is very much the same as it would be, if we were to say, that because in the operation of lithotomy, nervous, or inexperienced operators have cut deeply into the rectal pouch, and, becoming confused, have not been able to open the bladder at all; therefore, that the operation for stone is one which ought not to be performed.

Two of the worst cases of mischief to the vagina which can be conceived, have come under my notice at "The London Home." In one case the whole of the vaginal walls had been destroyed, and the uterus, bladder, and rectum open into a small external pouch situated where the mouth of the urethra originally was. In the other case the whole of the vagina and the greatest part of the bladder had sloughed away, and the opening from this cavity leads into the rectum. In both these cases, of course, all control over the urine and fæces is lost, and the women must remain in a state of pitiable but irremediable misery, with no capability of performing any of the duties of life. In neither of these cases had instruments of any kind been used, although the labour was exceedingly tedious and heavy.

With respect to vesico-vaginal and recto-vaginal fistula, I have had occasion, at the same institution, and elsewhere, to investigate carefully the history of a great number of cases. In many cases instruments, including oftentimes the forceps, have been used, but not until the labour had already lasted thirty to seventy or even more hours after the evacuation of the liquor amnii, and the woman had become greatly exhausted. Then the history proceeds to say, that great pain came on in the vagina, two or three days after delivery, with oftentimes such retention of urine as to necessitate catheterism. This pain was accompanied with offensive discharge and much swelling. It lasted eight or more days, when suddenly something gave way. The pain immediately ceased, and all power of retaining the urine was lost. Now this history, which is the invariable one given, points to

inflammation following upon long-continued pressure, and succeeded by sloughing, as the cause of the fistula. It is extremely rare to be told that *immediately* after the labour was terminated the urine escaped. If the forceps had caused the tear, all power of retaining the urine would immediately cease. It would not require any sloughing and its consequent symptoms to prepare the way. With regard to ruptured perinæum, it takes place more frequently without instruments, than with. Mr. Baker Brown has recorded fifty-three cases upon which he has operated, and in thirty of these no instruments of any kind had been used. Furthermore, it is well known that there is no necessity for leaving the instrument upon the child's head whilst it is passing through the perinæum, a time during which this lesion most frequently occurs.

The special ill effects to the maternal system at large, are even more difficult to point out. Indeed, I hardly know that we can fix upon a single one, as being caused *especially* by the application of the forceps. When we follow the rules laid down for our guidance, we must, before we render any extraneous assistance, have such a train of symptoms developed as in themselves denote great danger. Allow me to recal to your notice the state ordinarily described as denoting the necessity for the use of the forceps. The pains must have nearly ceased; vomiting and severe shivering; dry tongue; sordes on the teeth; pulse above 120, weak, and perhaps intermitting; fetid discharge from the vagina; restlessness, and even slight delirium; listlessness and supineness, with a certain amount of careless indifference to anything which may be suggested; and, to complete the picture, some tenderness of the abdomen. It is not stated that these symptoms are to be fully present before artificial aid is rendered, but they are to be so far developed as to cause uneasiness and alarm. Some of our more recent treatises recognise the fact that it is better to anticipate such a state, and not to wait so long, as Osborne, and some others following him, consider necessary. It is very certain that the proportion of deaths must be very

large, as we cannot, with any certainty, calculate upon sufficient constitutional vigour being left to rally after so serious a state. It is self-evident that, as the forceps were used to relieve, they could not be a cause: is it not right therefore to say that the ill effects upon the maternal system which are usually attributed to their use, ought, in reality, to be imputed to the tedious and prolonged labour itself?

Section II.

What are the ill effects produced upon the child by the use of the forceps?

The answer to this question is even more important than the last. The forceps have been emphatically called the child's instrument, in contradistinction to craniotomy. It is upon the child that their chief force is exerted. The mother may be said to be passively, whilst the child is actively, affected by them. We cannot, therefore, too carefully ascertain what their effect really is. Upon brief consideration, we are struck with the amount of compression to which the fœtal head may be subjected; and, knowing that the brain is peculiarly affected by pressure, we feel that this is the most serious source of danger, and the one which requires the strictest investigation. It will assist us to understand aright the amount of compression which can with safety be applied by the forceps, if we first ascertain how much may take place in unassisted labour. If the pelvis be a fair sized one, and the child's head moderate in proportion, its shape when born is nearly round—bullet-headed, as it is termed. If the pelvis be moderate in size, and the child's head large, but, at the same time, its component bones loose and pliable, then, after a long and probably a heavy labour, the child is expelled alive, and its head very much lengthened in shape. Instead of being round, or nearly so, it has become oval. If a line were drawn from the point of the chin to the posterior angles of the parietal bones, or more correctly, the middle of the posterior fontanelle, it would be increased in length two inches

or more, the frontal and occipital prominences being, as it were, flattened and lengthened out. If the pelvis be small in its cavity, or masculine, and the child's head large in proportion or much ossified, then, after a very long and heavy labour, the child may still be born alive with its head apparently even more lengthened. I say apparently, because it will be found that the length to the points of the bones is not really increased, but that the swelling of the integuments, together with the serous or bloody effusion which has taken place underneath them, is the cause of the increased length. Further than this, we may have the bones (especially the parietal), if the sacrum be prominent, with a deep indentation upon them and in some cases they are fractured by the pressure to which they have been subjected. If, from any cause, the pressure be carried beyond this, the child will be born dead. Ingleby relates a case which we may take as a type. He says : "I found the vagina filled with a large soft body, connected above the brim of the pelvis, with the bones of the head . . . . . In eight hours, a still-born child was expelled by the natural pains. On examination of the head, a very deep and extensive extravasation of blood and serum covered the whole of the right parietal bone, extending to the adjacent bones. The vessels of the brain were excessively congested, but there was no escape of blood within the skull, yet the pressure of the effusion through the sutures, in connection with the internal congestion, proved fatal to life."

It has been amply proved by Radford and Simpson, that the child's head will bear pressure in some directions much better than in others. It can be carried to a much greater extent in the bi-parietal, than in the occipito-frontal. In speaking of the force exerted upon the head by the forceps, it must always be remembered, that it is not a general compression which they effect. If they surrounded the head, and pressed it together as a lemon squeezer, then it would become a most serious question how far they could be used with safety to life; but, in the large majority of cases, even including those in which the head is to a

certain extent wedged, it does not fill up the whole space of the pelvic cavity, as the hydrocephalic head does. It requires the labour to have been in the second stage for a *very* long time qefore this takes place. The fœtal head being made up of bones, having a large amount of play on every side, yields, when pressure is made upon two portions of the circumference, by the filling up or bulging out of the other portions. Thus, unless the compressing power has been very great, the brain itself escapes injury. It is a change of direction, not of relative position or rupture of substance, which takes place. If the head so filled up the whole circumference or extent of the pelvic cavity that pressure must be exerted upon the whole, when only a part was subjected to force, then the forceps could not be applied, as there would be no space; and therefore such cases do not come within the range of our present argument.

The ill effects of the forceps upon the child are said to be such a compression of the skull, as to induce either fracture of the bones, or disruption and tearing, more or less, of the structures of the brain; and in cases not so severe as this, congestion leading to effusion either of serum or blood, and causing death before birth, or convulsions and death a few hours after. Dr. Radford gives the dissection of two children still-born, after the use of the forceps, in whom he found mischief to a great extent. I have made several dissections of the cranium, both after uncomplicated and after forceps labour, and have occasionally found intense congestion of the brain, with or without effusion, either on its surface or into the ventricles. There was reason to think, in some of the cases, that the effusion took place after the fœtus had already died from the effects of the long-continued severe action of the uterus upon the placenta and its vessels. That is, it might be called a passive oozing instead of an active effusion. In the dissection of still-born children, where ergot had been given in full doses, and had produced powerful effects, these appearances are especially found. The same line of reasoning which holds good in reference to the ill effects upon the mother, is sound and legitimate here. The state

to which the fœtus is brought, by the long-continued labour, before the forceps are ordinarily used, is such as to be one of great danger, if not of death; and the fact that so many children born without instruments present the same structural changes, which have been attributed to the forceps, must induce us to pause before allowing its truth. Though they might cause by pressure a fatal effusion, yet, in the majority of cases, the effusion takes place previous to their use, and can no more be fairly attributed to them, than could the death of the mother from the pure exhaustion of a tedious labour, which had destroyed her rallying powers before the forceps were applied.

The other ill effects upon the child are injury to the features; cutting or tearing of the integuments of the scalp; bruising of the subcutaneous tissues, producing effusion of blood, &c.; partial, or entire destruction of the ear; partial paralysis of some of the nerves of the face.

We cannot conclude that any of these injuries are the necessary concomitants of the use of the instrument, but only of their abuse. The following case well illustrates this. Some four years ago I was called to a case where the gentleman in attendance had made long and strenuous endeavours to deliver the woman with the forceps. The head was pretty firmly fixed in the inlet of an average pelvis. The instruments which had been used were a pair of ordinary short ones; and consequently, when with some trouble they were applied, it was only the points which had pinched the head, instead of the hollows being equally placed along its sides. Upon applying a pair of properly suited long forceps, the labour was terminated in a few minutes. It was then found, that at the points where the short forceps had closed, the scalp had been cut through; and the violent efforts made had cut through the scalp and drawn it from the bones. Now in this case the injury, though produced by the instruments, would not have occurred had suitable ones been used; and it would be most unfair, certainly, to bring forward such a case as an argument against the legitimate use of properly applied and suitable forceps. It

may be mentioned, that I was called in in this case to sanction craniotomy; and when I wished to try the forceps again, I was informed that it would be quite useless, and a great waste of time.

Section III.

What are the causes of death, both maternal and fœtal, after the use of the Forceps?

It will be more conclusive for us to examine this question by itself, although to a certain extent it has been treated under the two former sections. Its importance is ample apology for any repetition.

Let us elicit, from such authorities as may be available, a statement of the causes of death, both after forceps and after tedious labours.

Dr. Collins says, that four women died after the application of forceps, but that none of these deaths were caused by their use. I cannot exactly discover, in two of the cases, the cause of death; but of the remaining two, one died from debility induced previous to labour, and one from inflammation of the uterus after adherent placenta, which required the introduction of the hand.

Drs. Hardy and M'Clintock give us better data. They record 5 maternal deaths after the use of forceps; 3 of these were from peritonitis, 1 from uterine phlebitis, and 1 from bronchitis. They further give us 9 deaths after unassisted tedious labour; viz., 4 from peritonitis, and 5 from phlebitis. It must further be borne in mind, that in several of these 9 deaths, the interior of the uterus presented a sloughy or gangrenous appearance.

Drs. Johnston and Sinclair record 6 deaths in forceps deliveries; 2 from peritonitis, 1 from phlebitis, 1 pneumonia, 1 scarlatina, 1 mental anxiety. They also give us 12 deaths in unassisted tedious labour. These deaths were caused thus—5 peritonitis, 1 peritonitis with metritis, 1 peritonitis with phlebitis, 1 peritonitis and sloughing, 2 inflammation

and sloughing of the vagina, 1 perforating ulcer of the stomach, and 1 post-partum convulsions. Dr. Simpson mentions 1 maternal death after forceps from puerperal fever.

We gather from these authorities, that the causes of death after the use of forceps are similar to those which produce it in unassisted tedious labour. This is what we might naturally expect, since we are not able to discover any specific effect which *should* produce death, as connected with the instruments themselves—bearing in mind, at the same time, that the ordinary rule of practice is to use them only in the worst of the tedious cases. It is this rule which causes the proportion of deaths after their use to be larger than that found in simple tedious labour. When nature has exerted herself to the extreme limit, and when the entire maternal system is upon the point of succumbing to the long-continued drain of the vital powers, then we are told to render her assistance. Is it true, then, to say, that the use of instruments is necessarily accompanied with great danger to life, and that we must use them very cautiously because of this danger?

With regard to the death of the fœtus, there is nothing to add to what has been already stated in the previous section. I would simply express my own strong feeling, that in a majority of the fœtal deaths from labour causes, it is the action of the long-continued and violent efforts of the uterus upon the child, previous to their application, which produces the various effects, leading to death, which have been generally attributed to the instruments themselves.

Section IV.

Not only is the danger both to mother and child increased by the duration of the second stage, but the convalescence of the former is tedious and unsatisfactory in the same ratio.

The enunciation of this law we owe to Dr. Simpson, and the statistics by which he has proved it are satisfactory as

well as clear. I do not transcribe his tables, as they would only increase unnecessarily the length of this communication. They are fully given in his obstetric works, with which you all are doubtless well acquainted.

As bearing much more immediately upon the object of this paper, at the same time that they are more complete, let me lay before you some statistical facts, which are deduced from Johnston and Sinclair:

5640	labours were finished in	6 hours.	Of these 21 mothers died, or 1 in 268.
4489	„	7 to 12 hours.	Of these 31 mothers died, or 1 in 144.
1745	„	13 to 24 hours.	Of these 15 mothers died, or 1 in 116.
163	„	24 to 36 hours.	Of these 4 mothers died, or 1 in 41.
84	„	36 hours and upwards.	Of these 8 mothers died, or 1 in $10\frac{1}{2}$.

If we deduct the deaths from non-puerperal causes, the results are:

In 6 hours and under	1 in 470 died.
In 7 to 12 hours	1 in 214 died.
In 13 to 24 hours	1 in 145 died.
In 24 to 36 hours	1 in 41 died.
Above 36 hours	1 in 12 died.

These results are drawn from all those labours which are perfectly natural, and uncomplicated with any secondary peculiarity which would modify or in any way alter their character. None of them were instrumental, but all were begun and finished by natural efforts alone. All foot, breech, arm, and placental presentations, as well as forceps and craniotomy cases, are thus excluded. The main object being to prove that mere duration alone, without any unnatural or abnormal circumstance, is *the great element* in rendering labour dangerous. These data being drawn from cases left entirely to natural efforts, are more conclusive than

any which could be deduced from a practice at large. Malpresentations, and other exceptional peculiarities, may be justly considered as bringing fresh elements into play, and thus fresh sources of danger by which the results would be much altered. In proportion to increased duration then, is there a rapidly increasing ratio of danger and mortality.

It is much more difficult, if not impossible, to frame tables which shall prove that the maternal convalescence is proportional to the duration of labour. The published reports of lying-in hospitals do not enable us to do it, as in most cases the patient, if at all able, leaves them at the expiration of a given time, and no idea of the time, when health is fairly established, can be formed. If we refer to our own individual experience in private practice, we can all of us recall many cases in which, after long and tedious labour, the mother has remained weak and powerless for many months, and oftentimes her system has never rallied, but she has finally succumbed to some attack which she would easily have shaken off if her health had been good. For the first few days such patients often get on well, but if we see them at the end of six weeks we find them still very much out of health. The worn and anxious countenance, the languor and lassitude, the restlessness and incapability of exertion, the variable and capricious appetite, the pain in the back, neuralgic pains in various parts, the irritability of bladder, and the uneasy nights, prove how severely, not only the system at large, but the uterus in particular, has suffered. We never, or hardly ever see this state succeed a labour whose duration is under sixteen hours, or where the second stage has not exceeded two hours.

The increasing danger to the fœtus is proved in an equally clear and decided manner, from the same cases. Thus, excluding all instrumental and complicated births, we have—

5640 children born in six hours and under, of whom 79 were still-born, or 1 in 71; or, excluding those which were born putrid, 1 in 207;

4489 born in from seven to twelve hours, of whom 70 were still-born, or 1 in 64; or, excluding those which were born putrid, 1 in 159;

1745 born in from thirteen to twenty-four hours, of whom 56 were still-born, or 1 in 31; or, excluding those which were born putrid, 1 in 55;

247 born over twenty-four hours, of whom 49 were still-born, or 1 in 5. There are no data here for separating those which were born putrid.

These facts are as convincing of the truth of the proposition as the former. They further show that the danger of fœtal death rapidly increases, according to duration of labour. One hour over twenty-four is far more dangerous than six hours over ten. The difference between 1 in 71 and 1 in 5 is very enormous, and calls for our most earnest endeavours to rectify it if possible.

Section V.

What is the relative danger of death after tedious labour, forceps delivery, and craniotomy?

It will materially assist us in forming a correct opinion of the value of the forceps, if we ascertain as nearly as possible the correct answer to this question. The impression is strong that the use of the forceps increases maternal and fœtal danger, and here is founded one of the chief objections to their use. The absence of Obstetric histories sufficiently comprehensive to embrace the necessary facts upon all these three points prevents us from bringing forward as strong a body of evidence as we could wish.

In Johnston and Sinclair's work we find the number of uncomplicated and unassisted labours lasting above twenty-four hours to be 247; and of these twelve mothers died from all causes, being 1 in 20. If we exclude one dying from causes unconnected with labour, we find the proportion from labour causes to be 1 in 22;

The proportion of children still-born in these cases was 1 in 5;

The uncomplicated forceps cases are 168. Of these nine mothers died, giving the proportion 1 in 18·6; but of these six were from causes unconnected with labour, therefore, 1 in 56 is the proportion from labour and its effects;

The number of children still-born in these cases was 20, or 1 in 8·4.

The number of uncomplicated craniotomy cases is 85, of whom nine died or 1 in 9·5; but of these one died from causes unconnected with labour, leaving 1 in 10·5 as the proportion dying from labour causes.

It is much to be regretted that we have no other histories which will enable us to deal with the cases recorded in the same way; Collins does not give us the necessary data, and Hardy and M'Clintock only partially. Might I suggest that such full and complete histories as could be furnished by many of our Fellows are much wanted, and would materially assist in settling many doubtful points.

Section VI.

What are the powers which may be exerted by the forceps, when applied with a view to terminate a labour?

It is well known that the forceps are double levers, compressors, extractors, and rectifiers; and all these various powers may be called into action in any case. The directions given for their use in most of our works involve the necessity of only two, viz., extraction and rectifying,—so much of their power as levers as may be necessary to bring about these ends and no more. We are particularly cautioned to allow the handles to reopen each time, after we have made an effort to draw down the child, lest they should compress the fœtal head too much. With very few exceptions, we are forbidden to tie the handles together, except perhaps loosely, to prevent an alteration in their position. As we are all agreed upon their use, when only these two actions are required, it is unnecessary to say any more upon this point. It is upon their lever power, used as compressors,

that we must enlarge a little. Though all parties agree that occasionally a little compression may be advisable, they do not enable us to form any opinion as to the amount, or give us any directions how far we may employ it with safety to the child's life; or, if the child be already dead, without injurious effects upon the mother.

We have various statements of the amount of compression which it is possible to produce upon the fœtal head. Baudelocque states that he has bent Levret's forceps on the head of a child without producing any real difference in size. Elsewhere, he allows that the transverse diameter could be reduced four and a half lines. Flamant says five and a half lines, Velpeau five or six lines, whilst Osiander mentions one inch. Dr. Burns allows three-eighths of an inch, Denman conjectures that it may be reduced to the extent of one-third, and Ramsbotham one-seventh of its size without the child being sacrificed. There is a large difference in these statements. How is it to be explained? If we take a dead fœtus, and endeavour to reduce the depth of the bi-parietal diameter by putting on the short forceps, and apply pressure with a short, sudden, and strong effort, we shall not be able to alter it much. This is probably what Baudelocque and others have done; and hence has arisen the opinion, that the amount of change which we can produce in the fœtal head is very small. Let us consider nature's mode of action when she reduces the diameter. By long-continued, steady, and continuous force. Hour after hour she steadily presses the head into the screw of the pelvic cavity, each uterine contraction producing a slight change, until the round bullet-head becomes the long oval, and the child is expelled alive. We are quite certain that nature's mode of action is always the best, when she can carry it on unmodified by artificial circumstances. Therefore, the great object we should have in view when using the forceps—especially the long ones—is gradually to produce the long oval skull, and the better we succeed in producing this change, the more likely shall we be to deliver with safety.

Dr. Radford had so great an objection to compression,

that in the construction of his long forceps, he has carried their compressing power to the minimum by shortening their handles, and placing the lock in the worst position. His great object was to prevent compression in the occipito-frontal position, which he justly considered the most dangerous. In practice, however, it is difficult so to place the forceps as to really exert much pressure between these points. The form of the head, and the relation which exists between the most prominent part of the occipital bone and the frontal ridge, prevent it. They are not upon an equal plane, neither can a well-made pair of forceps be so fixed as to bear upon these points. The brain must be pressed in a direction parallel with the base of its anterior lobes, to produce the dangerous effects which have been already spoken of, when comparing it with the effect of pressure in the bi-parietal diameter. In the proper mode of fixing the long forceps, the pressure is exerted upon the prominent part of the frontal bone anteriorly, and the junction between the middle and lower thirds of the occipital bone posteriorly. In doing this, the posterior mass of brain is lifted as it were into the hollow of the forceps, whilst the anterior lobes are depressed. The brain thus turns, as it were, slightly around an axis passing through the most important commissures, which thereby remain fixed, and are not interfered with. This movement is similar to the one which nature adopts in moulding the head into the long oval shape.

The point before insisted upon, viz., that it is often relative, not absolute, change which is required to bring the head down, should always be present to us. My own experiments have been made upon children still-born, in foot, breech, and funis presentations, whose heads retained as nearly as possible the average shape. I have put my long forceps upon the head in the position indicated above, and then passing a strong elastic band or bands around their handles, have left them on for a period of time varying from one to three hours. If the instruments were put on soon after birth, and the child had died in the passage through the pelvic cavity, there was

a very great change of shape—so great sometimes, that one child, whose head with difficulty passed through a circle of fourteen inches, after the forceps had been applied two hours and a half passed easily through one with a circumference of eleven inches. On dissecting these heads, I have not been able to detect any appreciable injury or change of structure. This, however, is no guarantee that there would have been no congestion or effusion, if the same pressure had been applied during life. This point cannot be settled by such experiments; but of the main fact that there is great change in shape, and a decrease of relative diameter, no doubt whatever remains upon my mind. From the very different state of the fœtus whilst in the uterus, the greater elasticity and mobility of the bones of the head, and the peculiar resiliency of living structures, there is reason to believe that a much less amount of pressure would produce an equal amount of change in relative shape during life. Since the organization of the child previous to the occurrence of respiration is of a low type, as far as reparative function, this pressure must be less deleterious than it would be after birth.

There is another mode of action of the forceps which may be of great assistance, and which some of our later writers have appreciated, though not to its full value. This is the alternate side-to-side movement of the instrument after it is fixed, constantly keeping the direction of the axis of the pelvis as the centre of the movement. By this means, we gain the combined advantage of a lever and a wedge, and are able to bring down a larger body through a given space than we otherwise could. It is not a solid impregnable mass that we are acting upon; but, as we have often said, a yielding moveable body, made up of several smaller portions. Thus, the surface of binding power is lessened at each change; and, instead of a ring of so many inches to be moved, it is only a half ring each time we act upon it with the instruments—the half diameter of the fœtal head. The action is as though each side of a wedge was serrated, and each small progress upon one side was the fulcrum upon which

the opposite side was moved at each lateral change. In this way we obtain the combined force of several mechanical powers, without danger to the mother.

Section VII.

What are the states in which the forceps ought to be used?

The object of this section is to bring into one view the various states arising during labour which warrant the application of the forceps. Many of them are fully recognised in all our standard works, whilst others are very cursorily noticed. My observations will be very brief.

We will begin with those forms which involve a change either in the bony cavity of the pelvis, or in the mode of presentation of the child. We shall then pass on to those which arise from change in action, or alteration in the structure of the uterus; and finally examine those depending more immediately upon some abnormal condition of the maternal system at large.

(*a.*) Alterations in size or shape of the bones of the pelvis. This is one of those occurrences rendering the use of the forceps advisable, upon which all are agreed. The point upon which differences of opinion arise, is the amount of change which will allow the forceps to be successfully used. The question is, what is the smallest sized pelvis through which a living fœtus can pass? This has been answered by different authors each in a different manner. It is very evident that it is almost impossible in any individual case to determine before trial has been made. If the size of all children at birth were the same, and the mobility of the structures of the head allowed the same pressure to produce the like effect, we should then be able definitely to settle the point. This not being the case, we must have a certain latitude of judgment; and in nearly all cases the forceps should be used before resorting to severer measures. We shall hereafter show that the time at which they are applied is of much importance in reference to a successful issue.

As the pelvis varies very much in its shape, so will also the probability of a successful issue. In the masculine, the equally small, and the slightly ovate, it will be greatest. In the fully marked ovate we should turn the child; but not succeeding, or other circumstances preventing it, we should generally make a trial with the forceps. Having only met with two cases of Naegele's oblique variety, and in each having been obliged to craniotomise, my experience is too limited for me to recommend their use here. In some cases of prominent or ossified coccyx their use is strongly indicated. In the minor oblique form we may succeed, but it must be only slightly marked. In the funnel-shaped pelvis they are very valuable.

(*b.*) Disproportion between the size of the head and pelvis, either at the brim or in its cavity. This arises from the child's head being larger than normal, or more ossified, or from the pelvis being relatively smaller. In many women, especially among the labouring classes, the children are very large. This may cause difficulty either at the brim, or in the cavity. In the former case, the application of the forceps at the period, and in the manner hereafter recommended, is often of great value. So also, when the head will not easily pass through the outlet, as in the funnel-shaped pelvis, a slightly increased power often terminates the labour rapidly. Of course, great judgment will be required in calculating the probabilities of success, but in all cases where we can find space *at any point* to glide our instruments in, we should cautiously make a trial. We should not give over our attempts without a steady continued effort. It is useful, moreover, when practicable to shift the grasp of the instrument occasionally—it conduces to the moulding of the head. It often happens that the chief difficulty arises from the head being a little too large for the antero-posterior diameter of the inlet, and there is plenty of space for the application of the long forceps, especially in the earlier stages of the case. By applying them in the oblique position, they soon alter the relative size of the head, and a very slight extractive power draws it past the source of difficulty.

(*c.*) The head entering the brim in a wrong position. This form of difficulty occasionally occurs, though perhaps less frequently than has been supposed. Now and then, we have the occipito-frontal diameter of the head coming down in the sacro-pubic diameter of the pelvis, or the head tilted over the rami of the pubes. In both these positions the early use of the forceps is invaluable.

(*d.*) The hand or hands coming through the pelvis lying alongside the head. In many cases we can, by gentle manipulation, cause the hand to return into the uterus whilst the head continues to descend; or we may alter the position of the hand, and keep it in those particular angles which are not filled up by the head in the upper and middle thirds. In many cases we cannot alter it, and it continues to be driven onward with the head, at each pain. We must now deal with it as a case of disproportion, and use the forceps early.

(*e.*) Presentations of the face always very much increase the tediousness as well as pain of the labour, owing both to the increased diameter with which the face presses upon the lower parts of the pelvis, and also because it cannot glide under the pubis with the same facility as the occiput does. It is wise, if the labour be tedious or severe, to apply the forceps. This procedure often saves the life of the child, which otherwise would be lost; and, at the same time, prevents the loss of tone in the urethra, which is frequent after these presentations. If the pelvis be either relatively or absolutely smaller, it is advisable to interfere much earlier than otherwise we might be tempted to do.

(*f.*) Face to pubis presentations, or the exceptional terminations to Naegele's third and fourth head positions. The labours in which this occurs are always heavy and tedious, especially in the latter stage. The face cannot glide down or emerge from under the pubis in the same way as in ordinary cases, and the parts are much longer in dilating. The use of the forceps much facilitates the labour, and saves a good deal of maternal suffering. Occasionally we are able to carry the head round into its

natural position, converting it into an ordinary labour. It is not advisable to attempt this, if the uterus be firmly contracted; as the body of the child may not turn with the head. It is quite immaterial, as very slightly increased traction will rapidly and safely cause the face to emerge from under the pubis.

(*g.*) Funis presentations accompany the head in two thirds or rather more of the cases which occur. Sometimes we are able to return the cord, and it does not again prolapse; but, unfortunately, these are exceptional cases. If we can contrive to place it in one of the angles of the pelvis, whilst the os is dilating, we may, by an early application of the forceps, save the child's life. They should be applied at the earliest practicable period, providing the pulsation of the cord has not entirely ceased for some time. If it be failing, or only just ceased, we may often save by prompt action.

(*h.*) Hæmorrhage, either accidental or unavoidable. In many cases of accidental hæmorrhage, even after the os is fully dilated, the bleeding continues, and the head makes no progress. We should at once apply the forceps. Occasionally, in unavoidable hæmorrhage, it is prudent to apply them, especially if from any cause we have not seen the patient in the earlier stage of the labour, and she has become much exhausted.

(*i.*) Inertia and sluggishness of the uterus, is among the most frequent causes requiring the use of the forceps. The pains during all the earlier part of labour may have been very good, and then suddenly cease, and hour after hour passes without renewal. In other cases, particularly in lymphatic temperaments, and where the woman suffers much from leucorrhœa, the pains during the whole course of labour are deficient in power. Women who have borne many children, or who are much advanced in years, and very young persons, are liable to weak and sluggish pains. From whatever cause arising, it is a state which cannot be too soon relieved. We are generally recommended to give ergot or other agents, to re-excite pains by stimulating or

especially acting upon the uterus. I believe ergot to be a drug most dangerous to fœtal life, and shall have occasion presently to prove it. My own recommendation in all these cases is, that the forceps should be promptly applied, and a dangerous state put an end to. There is nothing to be gained by delay. The mere presence of the instrument will often excite the uterus to renewed action, and in all cases very slight traction upon the child will be sufficient. Inertia of the uterus is generally present when the head has descended low in the pelvis, and requires only a little more force to cause it to make its exit. From whatever cause arising, it is a source of great anxiety. If the pains have been strong, regular, and efficient in the earlier part of labour, and becoming weak and irregular, gradually cease, we should at once deliver. Even when the mother is inclined to sleep, we should pause before allowing her to do so undelivered; for, though sometimes upon awaking, the pains return with a good deal of vigour, yet it is not always so; and every five minutes she remains with the labour in the second stage, though pain be not present, is adding to her present danger, and prolonging her future convalescence.

(*j.*) Stricture and irregular action of the uterine fibres. The term stricture is not a perfectly just one; for, in this species of inefficient labour, it is not one distinct set of the uterine fibres which are contracted, but sometimes one set and sometimes another; that is to say, the uterus is excited to action and begins to work, but instead of acting gradually, with an increasing and general spreading intensity, as in natural pains, it appears to pause in its career, and only a portion of its fibres acts—some of the longitudinal or some of the circular or even some of those starting from the Fallopian tubes as their centre. The consequence is, there is no progress. Such pains begin well, and from the noise of the woman, and the strong efforts she is evidently making, you fancy she must be having a good pain; but if your finger be upon the child's head, you are astonished to feel that it makes no progress, but balances on the finger as a mere inactive

mass. The os has already dilated, which renders it more peculiar that such violent pain should produce no effect. By placing the hand upon the abdomen, we feel that the uterus is not contracting in a normal manner. If the woman have previously borne children, she will tell you that her pains are not the 'right ones,' that they are very severe, but have no effect upon the child, no forcing or bearing down. The cause will generally be found to be a somewhat irregular development of the uterus, and that one set of fibres is more perfectly developed than another; now and then, but rarely, that there is a change in the constitution of the fibres, probably fatty degeneration, which prevents them contracting either to the same extent, or at the same time. Whatever the cause may be, the effect upon the labour is simple. The labour does not progress, although there is no apparent cause. Hour after hour goes by, and yet we are no nearer its termination. At last the uterus becomes seriously affected, the pains flag, the maternal system becomes affected, and a most serious state results. This is not at all an uncommon affection, and the forceps should be applied so soon as it is recognised. The uterus never fails to contract properly, at any rate sufficiently so as to prevent any post-partum hæmorrhage, so soon as the child is born. You will observe that this is a very different state to that commonly called a stricture of the os; and which takes place in the os itself, either before, or during dilatation, and always ceases when, either naturally or artificially, it has become dilated to the size of a crown-piece.

(*k.*) Irritability of the uterus, very much resembles, in its primary symptoms, that state last described, but differs much from it in the course which it takes and the causes which produce it. The woman is taken in labour, and the membranes rupture, either naturally or in consequence of meddling interference, very early, even before the os has began to dilate. The bowels, for some days, or, perhaps three or four weeks, have been out of sorts, easily purged, and there has been a good deal of straining with every motion. Probably, a good deal of mucus and some blood has been

passed, and the tongue has been strawberry-looking. She has done nothing, thinking it was a part of her necessary suffering. Labour begins, and after a tedious period, and a great deal of heavy pain, the os becomes dilated to the size of a crown or more. The vagina has become slightly hot and dry. Now begins the state peculiar to this affection. The pains are very heavy and severe, and yet no progress is made. They gradually become almost continuous, accompanied with violent involuntary bearing down efforts, and yet the finger against the child's head shows no propulsive action upon it. In a very short time after the os has become fully dilated the woman's system becomes affected. She is restless, uneasy, tossing about, and slightly delirious at intervals. She rapidly passes from this into a state of torpor, or perhaps convulsions. If a labour assumes this type, and is not at once relieved by opiates and such agents, we should deliver at the earliest opportunity at which we can apply the forceps.

Perhaps you will allow me to mention two facts I have observed. First, that this state is especially prevalent at certain periods. In 1848, and again in 1853-4, it was of very frequent occurrence. Second, that the best remedy for the peculiar state of the intestines which precedes it is castor oil, in 25-minim doses, every three hours. It is curious that so small a dose, frequently repeated, appears to allay the irritation of the whole system.

(*l.*) Inflammation of the uterus. The symptoms are well marked, and, as a rule, it is caused by mismanagement of the labour. If we are sufficiently alive to the irritability of the uterus, we shall deliver before the inflammation comes on. If however the latter be present, our wisest and best course will be to use the forceps, and then deal with it in the ordinary modes.

(*m.*) Neuralgia of the uterus, or spasm. Neuralgia of the uterus in the pregnant female, gives rise to that form of labour to which the term spasmodic may be well applied. The pains are extremely violent and sharp; they begin at

once, as it were, in their full intensity, instead of gradually rising to their climax, and then as gradually subsiding. In most cases, previously to labour commencing, there has been more or less occasional pain in the uterus, alternating with pains in other parts, especially in the course of the sciatic nerve. There is a strong tendency to cramp, either in the bowels or legs. The woman screams sharply and violently at each pain, and complains much of their peculiar character. The pains are very similar in character to those which occasionally precede rupture of the uterus; the child does not descend, and their effect is very slight when compared with their violence. The system suffers very rapidly and severely by their continuance, though not exactly in the same way as in a disproportionate labour. The forceps should be applied at the earliest opportunity.

(*n.*) Rheumatism of the uterus is a frequent affection, and probably arises from the very inefficient way in which most women are clothed about the loins and upper part of the thighs. Previously to labour the uterus is very tender, and you will be told that the woman is so sore that she can hardly bear the clothes to touch her. You will be probably called to her several times, under the supposition that labour has set in, before, in reality, there is any action of the uterus. When, at last, true pains begin, they are violent in character —not so sharp and sudden as in spasms, but excited by very slight circumstances, even the movement of the child. They linger for some time. You may fancy the pain is gone, when it returns again, thus ebbing and flowing over several minutes before finally ceasing. It is always violent and produces a good deal of exhaustion. It is curious how much relief is afforded, even in the height of labour, by gentle continuous friction of the abdomen, as first suggested by Power. We are fully warranted in assisting with the forceps so soon as everything is favorable for their application.

(*o.*) Labial thrombus and severe vomiting. I associate these together, not because there is any connexion between them, but simply because the only observation about them I

shall make is, that their occurrence will often render the use of the forceps advisable.

(*p.*) Debility of the system generally, or of the uterus in particular. The character of the pains in these two states resemble each other very much. The great point of difference is the effect upon the maternal system. When the debility affects the whole system, there is really greater danger than when the uterus alone is affected. When labour sets in, the nervous system does not appear capable of furnishing a sufficient amount of nerve-force to the uterus to excite efficient action. The pains are short, inefficient, and at long intervals; not violent in character, beginning, but not rising to a climax. Just at the moment we find it beginning to act upon the child, the pain passes away again; and then, after an interval of twenty minutes or half an hour, we have another which acts in precisely the same way. This may continue for some time, our patient wishing she could have a few good pains, or that they would link together, and she is sure it would soon be over. We heartily echo her wish.

In debility of the uterus we have much the same character of pains, but this condition may and often does exist quite independently of general debility.

In both forms it is advisable to assist the weak efforts of the uterus with the forceps, at the same time that we take other measures in reference to the general state.

(*q.*) In some women, especially those who have borne many children and are of a lax habit, the abdominal muscles stretch to an enormous extent. If not properly supported by bandage after the labour, they remain so. In subsequent pregnancies, the uterus may so fall over the pubis as to lie obliquely, and when labour comes on, the os is directed towards the promontory of the sacrum instead of in the axis of the pelvis. In this case, it often happens that the means ordinarily recommended, such as bandaging, and placing the woman upon her back, will not be sufficient; and we must use the long forceps in order to give the fundus of the uterus the power of acting in the normal direction of the axis. In one case I attended a woman in her ninth, tenth,

eleventh, and twelfth labours; in each I was compelled to use them for this purpose, and in each labour there was greater difficulty in so tilting the uterus as to be able to apply them. In the tenth labour, the placenta was adherent; and on introducing my hand, it was with the greatest difficulty it could be reached, for it absolutely lay in a kind of bag, over the front of the pubis, so that it was necessary to turn the hand over the pubis before it could be extracted—a much more difficult task than many of you perhaps might imagine.

(*r.*) Extreme corpulency. It is singular that in many cases this appears to be a cause of most inefficient labour pains. It is equally curious, that in many such cases, the child is below the average size. It is better not to delay in these cases, but to apply the forceps at once, if the labour be not steadily advancing.

(*s.*) General diseases of the maternal system, especially of the heart and respiratory organs. By the effect which the labour has upon these parts, especially in the second stage, and when the voluntary efforts are called into play, it behoves us to watch very narrowly, or we shall have the state of disease much and dangerously increased. Our sheet anchor here, is the termination of the labour at the earliest possible period with the forceps, the great object being to prevent such an amount of excitement in the already diseased organs, as may place our patient beyond the pale of temporary relief. A slightly increased excitement may be sufficient to destroy, and therefore we should certainly not hold ourselves bound by ordinary rules. Extraordinary states call for prompt action.

(*t.*) There are some other states in which we may be called upon to use the forceps. Convulsions, rupture of the uterus, tumours or polypi preventing the regular contraction of the uterine fibres. The head impacted after footling, breech, or turning cases; very rarely in œdema of the labia. These, and perhaps some few others, are the exceptional cases in which all are agreed that the forceps may occasionally be required.

Section VIII.

At what period of labour is the use of the forceps indicated, and what are the symptoms showing the propriety or necessity for their application?

The answer to this question is allowed by all of us to involve some of the most important considerations of our daily practice. Let us ever bear in mind that two lives are at stake—one moderately involved, the other greatly. The mother may die from delay and procrastination, the child surely will. I put it thus strongly because, in most cases, this is the real point. From early prejudices, from a dislike to interfere with a natural process, from an oft-repeated motto, that "meddlesome midwifery is bad," which, parrot-like, is banded from one to another in all shapes and ways, and oftentimes from even mere unworthy motives, we shut our eyes to the arising danger, and trust that, as nature has often finished, so she will finish again. If by the term "meddlesome midwifery," we mean repeated examinations without an object, unnecesary dilatations of the os, and the score of other like things done without a definite purpose—then it is bad. But prompt, active, ready, and efficient interference, when help is called for, is good. We should remember that nature is always up to her work when all her laws are strictly observed. But when, day by day, from our birth to our death, we are living in open defiance of these laws, and are despising them in nearly every action of our lives; when, by increasing civilisation, we are becoming more and more artificial, we cannot expect that, even in labour, nature will be so generally equal to her work. She cannot carry on her processes in safety and certainty when all the necessary ground is undermined, and a mere semblance of what she requires.

There is a paragraph in Dr. Tyler Smith's work on Parturition, published in 1849, which appears to me to furnish the key-note to all our conduct in the use of the forceps. He says—"When women die from prolonged

labour, death occurs, not merely from exhaustion caused by physical suffering, but from the exhaustion caused by the strong muscular contraction of the uterus and its associated organs. The discharge of the vis nervosa and the vis insita, in the muscular contractions of each pain, has a depressing effect quite distinct from, and independent of, the mere painfulness of each uterine action. Each of the great contractile efforts of labour has an exhausting effect; but when more severe, or continued longer than usual, every returning pain is a distinct shock. A woman insensible to pain may still sink, and perish from the spinal shock of labour."

This is not a theoretical history of a supposed case, but a simple statement of a philosophical necessity. It follows that our great object should be to lessen, as far as possible, the number of pains requisite to finish the process. Every pain which a woman has unnecessarily, is at the expense of her nerve force, and leaves a certain amount of exhaustion behind it. Continue this, and the nervous system becomes so shaken at its source as to require a long period to rise to par, even when it does not, from the effect being perfectly exhaustive, entirely succumb,

What, may be asked, do we gain by waiting? Is it anything more than the being able to say that the labour was terminated by natural efforts. We have proved that mere tedious labour is by itself most fatal, both to mother and child; and that every hour which the labour continues after full dilatation of the os, is productive of increased danger, and that this danger increases in arithmetical ratio to increased time. We have shown, and shall further prove, that the scientific use of the forceps is, by itself, unattended with special risk; I maintain, therefore, that tedious labour in the second stage is one of the things we should never see, and that the use of the forceps in such cases should be the rule, and not the exception.

The second stage ought to be steadily and rapidly progressive, and every pain ought to have a decided effect in expelling the child.

The element of time alone is a most baneful, false, and erroneous one; and it has always appeared remarkable that it was ever allowed to be one of the elements of our judgment. To wait four or six hours after the os is fully dilated, and the membranes ruptured, and the head made no progress; or to wait until the labour has lasted twenty-four, or any other number of hours, is unscientific. Are all constitutions alike, or do the series of changes which produce a certain effect upon the uterus run their course in a given time with mathematical certainty.

We should never wait until bad symptoms have developed themselves. They should never make their appearance. If the pulse be rising even to 100, if the vagina be inclined to dryness, if the tongue be turning brown and the woman at all excited, we should interfere, if possible, and prevent the appearance of more serious states. If there be any olive-coloured discharge we have waited too long.

Actively progressive labour is the state which ought always to be present. If it be not, and the os uteri is fully dilated, or in some cases dilatable, and there is no contra-indicating circumstance, we should apply the forceps, and terminate. By contra-indicating circumstance, I mean the death of the child, or such a state of pelvis as will absolutely necessitate turning or craniotomy.

Another strong argument in favour of their use, at a much earlier period, is derived from the position of the head of the child in the earlier part of its passage through the pelvis. If you will recall to mind the way in which the head enters the pelvis, you will remember that the first point, in the large majority of cases, is the posterior angle of the parietal bone; and, consequently, the vertex, or small end of the wedge, is the first part down. This continues to descend for a certain period, and then the frontal bone is forced down; and we have the whole surface of the head, as it were, presented to us. Now, if, especially in those cases where we would apply the long forceps, we do so early, we are able to preserve the wedge-shaped form of the head, and to use compression when

requisite, in that direction; which, whilst it is most favorable to lengthening the skull, is also least dangerous to the child. If we delay their application, even though the head be not forced into the pelvis, yet the driving power of the uterus forces down the body of the child, until the head is turned a little upon its axis—and the forceps when applied do not seize it between the prominences of the frontal bone and the lower third of the occipital, but between the frontal and upper third of the occipital, and this position is unfavorable for compression and much more dangerous to the child.

Whether in the brim and inlet of the pelvis, or afterwards in the cavity and outlet, a careful study of the changes which take place in the child's head whilst it is progressing, and yet not subjected to forcing pains, will show that the earlier we apply the forceps, the better will be the position in which we shall grasp the head.

Again, the longer the head presses upon the maternal soft parts, the more they become filled with effused fluids below the point of pressure. Although this may not progress to such an extent as to cause much mischief, yet it will militate against the use of the forceps by decreasing the room for their passage and rendering the vagina more liable to injury.

Section IX.

Short abstract of the forceps cases which have come under my own care.

Permit me to observe that a distinction should be drawn between the cases which occurred in the ordinary course of our own practice, and those to which we may be called by another person. It is not fair to mix them together, in an attempt to draw conclusions as to the result of a given line of practice. They may elucidate each other, but must be spoken of separately. The number of midwifery cases, of which I have a record up to the time of deducing the following results, was 6053.

In these 6053 cases the long forceps were used 99 times, or 1 in 61; and the short forceps 133 times, or 1 in 55 cases.

In the same period the long forceps were used 53 times, and the short forceps 17 times, in consultation cases.

The results to the children were as follows:—

			Born alive.	Still-born.	Per cent.
Long forceps— private cases	Boys	65, of whom	51	14	or 23·07
	Girls	34, „	29	5	or 14·70
Long forceps— consultation cases	Boys	37, „	25	12	or 32·43
	Girls	16, „	13	3	or 18·75
Short forceps— private cases	Boys	76, „	71	5	or 6·57
	Girls	57, „	53	4	or 7·01
Short forceps— consultation cases	Boys	10, „	10	—	—
	Girls	7, „	7	—	—
Total		302	259	43	14·23

We have 232 private cases, of which 28 were still-born, or 1 in 8·2. In these 28 still-born children, 11 had died some time before birth, and were more or less putrid. If we deduct these, the proportion becomes 1 in 13.

We have 70 consultation cases, in which 15 were still-born, or 1 in 4·66.

In the private long-forceps cases, the weights of eleven of the still-born children are recorded, and are as follows: 10½ lbs., 12½ lbs., 14 lbs., 11 lbs., 12½ lbs., 10 lbs., 14 lbs., 15 lbs., 16½ lbs., 10 lbs., 11½ lbs.

The average duration, from the full dilation of the os until termination, was—

In first labours 6h. 24m., and in other than first labours 5h. 46m.

In the private cases, both long and short, all the mothers recovered.

In the consultation long-forceps cases, two of the mothers died, both from exhaustion. In one case two hours, and the other two hours and a half after delivery.

All the remaining mothers recovered.

The private cases include all in which forceps were used, whether complicated or not.

Section X.

What are the cases in which the forceps may be more frequently used, not only with safety but with great positive advantage?

I feel great diffidence in answering this question, because my opinion differs much from that of many men whose position and standing is deservedly very high, and whose views are entitled to the highest respect and deference. However, the body of facts which bear me out in my views appears so strong, as to embolden me to lay them fully before you.

We cannot too strongly remember that the pain of child-birth is merely the expression of a means to an end—a physiological necessity of certain actions, to produce certain effects. It may exhaust and even kill. Every pain, therefore, which a woman suffers after it is within our power to deliver, is a source of evil to her system, which, as her attendants, we have no right to permit her to endure. We must help her out of a state of suffering and danger at the earliest period, at the same time ever remembering that we must preserve the life of the child.

In classes *a* and *b* the forceps ought to be applied much earlier than is usually considered necessary: 1st, Because, early in labour, the child's head is in a more favorable position for their safe application, either as compressors or extractors; 2d, Because there is an absence of all swelling and irritation of the maternal passages, and more room to bring down the head in the most favorable position; 3d, Because the child is more likely to be alive and to live after birth, when it has not been too long compressed by the violent action of the uterus; 4th, Because the impaction of the head in one position is highly dangerous to the maternal organs; 5th, Because it is useless to allow the maternal system to become exhausted by pain, when we can save from dangerous and tedious convalescence without bringing in a new element of danger. We ought to use the forceps

as soon as possible after the head ceases to be balanced easily upon the end of the finger during the absence of a pain. Whilst strenuously objecting to their use when the os uteri is in the slightest degree rigid, yet we must remember that in many of these cases it may not of itself be able to pass over the child's head before great mischief is done to the mother. It is only waiting for the head to be driven down into it, when it offers no resistance, and is really a mere lax band. In these cases, we may apply the forceps before the os is fully dilated, but we should be more cautious in gliding them over the child's head.

My experience in these cases leads me to say, that if the forceps were applied, as already shown, in the proper direction for compressing at the earliest possible period and were used as assistors to the pains, instead of being applied only when the head is jammed into the pelvis, filling up every portion of it, and being forced into a position the most unfavorable for delivery, we should more often succeed in saving the child's life as well as the maternal system. The long delay previous to their use appears to me to destroy the very efficiency of the instruments themselves, and prevents the good effects otherwise attainable.

On classes *c* to *h* there is nothing to add to what has already been stated.

Class *i*. In this class have occurred the large majority of cases which are recorded as short forceps cases. It is very problematical if it be a right line of practice to rouse an overworked and overtasked organ to fresh exertion. This cannot be done without causing such a change in its nerve-tone, as must for some time leave it weakened, and prone to assume various forms of diseased action, especially hypertrophy, ulceration and neuralgia. It is a frequent cause of deficient involution. There is not sufficient vital power to carry it through the several stages.

Ergot, our most common oxytocic agent, exerts such a very baneful and deleterious action upon the fœtus previous to birth, that it must be considered as a poison. During the earlier part of my professional life, I was taught to consider

it as the obstetrist's best friend, and I was struck with the large number of children who were born only *just* dead. Since I have entirely omitted giving it, previous to the birth of the child, I have seldom met with this species of still-birth. I would refer you to Hardy and M'Clintock. These authors use it very largely, and the number of still-born children is very great. They do not give us the materials for calculating the exact amount of mortality after its use, but they have one statement which is very striking and conclusive. They mention 173 tedious labours terminated without instrumental assistance. Of this number ergot was given in 30 to overcome inertia in the second stage, and only 10 out of the 30 children were born alive. They add "in nearly every one of the above instances there was unequivocal evidence of the child's vitality when the ergot was given; and in the great majority of them delivery took place within two or three hours after the administration of the medicine." This is very strong evidence against its use; and, judging from my own experience, I should be inclined to say that these children might have been mostly saved if the forceps had been used instead of ergot. We have here the cause of the large fœtal mortality in the practice of these writers, and to which allusion will be made.

Johnston and Sinclair only gave ergot to 109 women, in 13,748 labours, and used the forceps after its administration, directly the fœtal circulation began to fail. In these 109 cases they applied the forceps 61 times. This is equally decisive.

In addition to this, there is an increased liability to retained placenta and post-partum hæmorrhage, when ergot has been given some time previously to the birth of the child; it also causes irregular or hour-glass contraction. These remarks do not apply to its use *after* the birth of the child.

The result of all these considerations is, that in all cases of inertia or sluggishness we should at once apply the forceps. The best time for their application is, when the pains begin to decrease either in frequency or vigour. We should not wait until they cease. As soon as the head is

brought down upon the perineum, so as slightly to distend it, we generally find that the reflex action will sufficiently excite the uterus safely, efficiently, and speedily, to finish the labour, it being unnecessary to retain the forceps on the head.

Used thus early in the labour, the woman is unexhausted, the child probably alive, and there is sufficient power left in the uterus to throw off the placenta without probability of post-partum hæmorrhage.

Class *j* is a common cause of tedious labour; and nothing is gained, but everything lost by waiting. It takes a great many pains to do the work of one good one, and yet they are as exhausting to the maternal system as if they were efficient. The labour should at once be terminated with the forceps.

Classes *k*, *l*, *m*, and *n*.—We should remember that every pain increases the mischief already present, and at the same time are quite inefficient for expelling the child. It is in these cases, that the almost gangrenous state of the internal wall of the uterus described by various authors comes on; and it is not too much to assert that the early use of forceps would in the majority of cases prevent it.

Class *o*.—Whenever severe vomiting sets in during the second stage we should at once use the forceps, even if no other symptom call for it.

Class *p*.—We should use the forceps here to make each pain do more work; but the extraction is not to be performed rapidly or to be looked on as the chief thing to be done.

As to the remaining classes, I have nothing to add to what has already been said.

The summary of this section is: that in the majority of the cases which call for the use of forceps they ought to be applied early. That nothing is gained by trusting to the efforts of nature after she has shown symptoms of inefficiency or incapability; whilst, on the other hand, everything is lost.

Section XI.

The earlier, and the more frequently the forceps are applied in proper cases, the more maternal and fœtal lives will be saved, and the greater will be the freedom from the after consequences of protracted labour?

The history of large midwifery practices which have been published, do not all contain a statement of the whole facts necessary for answering this question. As the forceps are applicable in presentations of the head, it is necessary to make our deductions from head cases alone, when judging of their power in saving life. We must therefore be able to separate all breech, footling, arm, and placental presentations, together with their maternal and fœtal mortality. They bring in fresh elements of danger not removed by the use of the forceps. We should also be able to separate the cases of craniotomy, so as to have a comparative view, with and without them, in arriving at the result to the child. Further, we must deal separately with the peritoneal deaths and those arising from pure labour causes, as the former are accidental in their origin and are not a *necessity* of labour mortality. In addition to this, we ought to separate both these classes of death from those arising from other diseases, labour accidentally occurring at the same time. This line of reasoning being the only one by which we can arrive at a satisfactory answer to our question, it follows that only those histories of midwifery practice which record these various points are really available. We have three most valuable works which we can use; and as they are histories taken at the same institution, and therefore of the same class of patients, they become doubly valuable. It is curious that the first and third of them might be almost considered as exponents of the point of practice which we are dealing with. In Dr. Collins' work we have a most sparing use of the forceps, whilst Johnston and Sinclair used them very freely.

We will first take Dr. Collins' statistics, and as a speci-

men of the manner in which we must deal with them, in order to arrive at the real answer to the question, let us give the figures in full.

We have 16,654 children, of whom 1121 were still-born.

There are 293 premature cases which must be subtracted, 16,654—293=16,361, and the still-born children of those cases 1121—293=838.

There are, breech cases, 202; foot, 152; arm, &c., 37; placenta, 8; making together 399, in which were 105 still-births. (This does not include of course premature cases). Forceps were used in the placenta presentations in 1, and craniotomy was performed in 2 cases.

The whole number of craniotomy cases was 118, and forceps 24.

Now 16,361—399=15,962, and 828—105=723. Therefore, as 723 is to 15,962, so is 1 to 22; or 1 child in 22 is still-born in those cases where forceps would be admissible.

Again, 118—the number of craniotomy cases, less 2, occurring in placenta prævia, leaves 116. Now, 15,962—116=15,846, and 723—116=607. Therefore, as 607 is to 15,846 so is 1 to 26; or 1 child in 26 is still-born in all cases available for forceps, and capable of delivery without craniotomy.

Maternal statistics.—We have 16,414 mothers, of whom 142 died from labour causes, of which 59 were from puerperal peritonitis.

We have 1 from peritonitis and 2 from other causes in breech, foot, and arm cases; and 2 from peritonitis, and 33 from other causes, making 35 in the craniotomy cases.

Adding 1 to 2, we have 3 to be taken from 59, the whole number of peritoneal deaths; leaving 56.

Now taking 3 breech, foot, and arm deaths from 142, we have left 139. As 139 is to 15,945, so is 1 to 115 nearly.

Taking 35 craniotomy deaths from 139 leaves 104. Therefore as 104 is to 15,827 (being 15,945, less 118, the craniotomy labours), so is 1 to 152.

Taking 56, the remaining peritoneal deaths, from 104,

leaves 48. Therefore, as 48 is to 15,771, so is 1 to 329, which is therefore the proportion of maternal deaths in cases where the forceps could be employed.

The forceps were used 1 in 694 } Together, 1 in 115
Craniotomy was performed 1 in 137 } nearly.

The average duration of labour in 11 uncomplicated forceps cases was 38h. 5m.

The maternal deaths from all causes in these cases were 3, or 1 in 3·66.

The still-births were 4, or 1 in 2·75.

It will not be necessary to enter into details with the others. The results only, which are arrived at in the same manner, are therefore given.

Drs. Hardy and M'Clintock.—Fœtal—1 in 17 still-born, in cases where forceps could be admissible; and 1 in 20 still-born in all cases available for forceps, and capable of delivery without craniotomy.

Maternal.—All cases, excluding breech, &c., cases, 1 in 128 mothers died.

Excluding craniotomy, 1 in 155.

Excluding peritoneal deaths, 1 in 334 is the proportion of labour deaths where forceps could be employed.

Forceps used, 1 in 355 } Together 1 in 91.
Craniotomy, 1 in 123 }

The average duration of labour in 18 forceps cases was 35h. 43m.

The maternal deaths from labour in these cases, were 5, or 1 in 3·6.

The still-births, 8, or 1 in 2·2.

Drs. Johnston and Sinclair.—Fœtal—1 in 26 still-born in cases where forceps could be admissible; and 1 in 35 still-born, in all cases available for forceps and capable of delivery without craniotomy.

Maternal.—All cases, excluding breech, &c., cases, 1 in 121 mothers died.

Excluding craniotomy, 1 in 186.

Excluding peritoneal deaths, 1 in 502 is the proportion of labour deaths where forceps could be employed.

Forceps used, 1 in 60 } Together 1 in 39.
Craniotomy, 1 in 107 }

The average duration of labour in 168 forceps cases was 29h. 46m.

The maternal deaths from labour in these cases, 3, or 1 in 56.

The maternal deaths from all causes in these cases, 6, or 1 in 28.

The still-births, 20, or 1 in 8·4.

These three tables, drawn from cases occurring in the same class, and under the same external circumstances, are peculiarly valuable. It will be seen that the maternal deaths steadily decrease, as the forceps are more frequently and earlier used. The fœtal deaths in Hardy and M'Clintock's series are influenced, as before stated, by their free use of ergot.

My own statistical results, as drawn from my own private records, are—

6053 children, of whom 207 were still-born. I have—breech presentations, 74; feet, 101; arm, &c., 59; placenta, 18; total, 252; of which 67 were still-born. Number of craniotomy cases, 16. Treating these numbers in the same manner as above, gives us 1 in 42 nearly, as the proportion still-born in cases where forceps could be admissible, and 1 in 46·5 still-born in all cases available for forceps and capable of delivery without craniotomy.

Mothers died, from all labour causes, 1 in 851.

Mothers died from all labour causes, excluding peritonitis, 1 in 1490.

Forceps used 232 times, or 1 in 26.

Craniotomy 16 times, or 1 in 378.

Whilst comparing these cases with the former ones, allowance must be made for the difference in the class of persons in which a good many of them occurred, and for the difference between delivery in a private house and a lying-in hospital.

For the sake of comparison and easy reference, let us bring the results side by side.

	Forceps cases.	Fœtal deaths.	Maternal deaths.	Forceps duration.
Collins . .	1 in 694 ..	1 in 26 ..	1 in 329 ..	38 hours.
Hardy . .	1 in 355 ..	1 in 20 ..	1 in 334 ..	35½ hours.
Johnston .	1 in 60 ..	1 in 35 ..	1 in 502 ..	29½ hours.
Harper .	1 in 26 ..	1 in 47 ..	1 in 1490 ..	16 hours.

Section XII.

General Summary.

We have endeavoured to show, as far as present opportunity allows, that there is no special maternal risk which necessarily attaches to the use of the forceps; and that the various injuries and other ill effects which are usually attributed to them, are not the result of their use but of their abuse. That when maternal death occurs after their use, it is generally because of the result of the length of time the labour has lasted before their application. That, so long as they are applied as the last resort in tedious labour, so long will the maternal mortality after their use appear to be very high. We have proved, from the only statistics which give us the necessary data, where the forceps were freely used, that 1 mother in 22 and 1 child in 5 died in unassisted tedious labour; whilst 1 mother in 56 and 1 child in 8·4 died where the forceps were used; and 1 mother in 10 died after craniotomy. This proves that the maternal death is less after the use of the forceps than after craniotomy or even unassisted tedious labour.

We have further proved that we may safely avail ourselves of the power of these instruments as compressors, if we use them early and apply them properly; that there are a large number of tedious labours, from abnormal or diseased action of the uterus itself, where they are most valuable and ought to be most freely used; and that the period for their use is early in labour, as soon, indeed, as the os permits, and long before the maternal system has begun to suffer, either locally or generally.

The statistics of my own cases, which were conducted in accordance with these principles, show a large and most important lessening, both of maternal and fœtal mortality.

In further support of my views, I have shown, from independent authorities, that the principles are correct, and are proved to be so by their, as well as my own, statistics.

Although, as before remarked, it is not fair to make a strict comparison between these two classes of cases, yet they sufficiently prove the correctness of the principles which are laid down. In conclusion, let me trust you will examine for yourselves, and give your unbiassed endeavours to judge of the correctness of the views laid before you.

ACCOUNT OF A FATAL CASE

OF

PUERPERAL PERITONITIS,

COMPLICATED WITH

OVARIAN DISEASE,

AND FOLLOWED, IN THE AUTHOR'S PRACTICE, BY

A TROUBLESOME SERIES OF FEBRILE DISEASES OF THE PUERPERAL STATE, THE PROBABLE CONSEQUENCES OF INFECTION.

BY

R. UVEDALE WEST, M.D., Alford, Lincolnshire.

Read July 6th, 1859.

On the 29th of December, 1858, I received a note engaging me to attend Mrs. S. R—, of W—t, distant six miles, in her confinement, which she expected would take place in the following March. And on Wednesday evening, March 2d, 1859, I received another note from the husband, a labouring man, informing me that his wife had been taken hastily in labour the evening before; and that there having been no time to send for me from Alford, a midwife living close by had been called in to afford the necessary assistance; and that the patient, as well as her child, was doing well.

On the following Friday evening, March 4th, it being the fourth day, I received a hasty summons to go and see this woman: "They were afraid that inflammation had taken place." I drove to W—t immediately, when I found matters as in the following report:

Friday, March 4th, 6 p.m.—Pulse 140, very small and

weak; abdomen much distended; excessive pain and tenderness, so that percussion could not be borne; headache; delirium; tongue white and slimy; had had a smart rigor the day before; there was milk in the breasts; lochia checked; countenance wild and expressive of pain; the bowels had been well moved the day before.

I felt tolerably certain that the case would be fatal; in fact, I told the friends and neighbours that I did not think she could possibly live beyond the following Tuesday.

Sumat statim Opii et Calomelanos aa. gr. iij.
℞ Pulv. Ipecac. comp., ℈ij;
Magnesiæ Sulph., ʒvj;
Spir. Ætheris Nitrici, ℥ss;
Mist. Camph. ad ℥vj.
M. sumat coch. ij ampla, 4tis. horis.

Also, frequent fomentations to abdomen.

The midwife not being present, and the woman herself not being able to tell me anything, I could elicit from the crowd of women surrounding the patient only the indefinite information that the child, a very fine, large, healthy male, was born after a very rapid but sharp labour at 7 in the evening of the previous Tuesday; that the placenta came away in about five minutes without any trouble whatever, and that the woman had been quite "brave" until she felt the rigor on Thursday, the third day. She had previously borne four children, the youngest of them being then five or six years old. Her age 29. I had, myself, never seen the woman before. My prognosis—that "she would die next Tuesday," was founded on the strong impression that the case, as one of puerperal fever, was a very bad one; and the seventh day from the lying-in was the earliest period at which I had known the death to take place in such a case.

Saturday, March 5th, 11 a.m.—Pulse, and nearly all the other symptoms, the same as last night; not quite so much headache. She had been very sick all night, rejecting nearly every dose of the medicines taken, as well as, pro-

bably, the opiate pill. As she was lying more on her back, I was able to percuss the abdomen slightly; the swelling fluctuated, and was not tympanitic. I had, the evening before, taken it to be a very early developed tympanitic condition. I now did not know what to make of it. It was acutely tender to the touch.

I found the woman was a great opium-eater, taking on an average ʒij of solid opium daily; and a great deal of her present complaining appeared to arise from her having, in vain, been all night begging her friends for a dose. She had been an opium-eater since she had the smallpox some years before.

℞ Liq. Ammon. Sesquicarb., ij;
Tinct. Card. comp., ℥ss;
Mist. Camph. ad ℥viij. M. s. c. ij, 3tis. horis.

It was clearly useless *my* giving anything of the nature of an opiate; I, however, told the women, that the patient had better have, at least, her usual quantity.

Sunday, March 6th, 11 a.m.—Free from pain since 5 this morning; pulse countless; countenance rather better, but still very wild; was vomiting frequently quantities of dark green stuff. Abdomen more swollen; could, however, bear percussion much better; upper part of intumescence tympanitic; the principal bulk slightly fluctuating; there was a feel, too, near the umbilicus, as of something solid. Query—*Ovarian disease?* I ordered a dose of castor oil, and wine to be given with the medicine.

On my way home, I was told by one of the neighbours that the husband, entertaining the preposterous idea, in which he was confirmed by some of the silly women about him, that there was another child in the womb, had, the evening before, solicited the attendance of another medical man, who, on hearing the history of the case, had declined it altogether.

Monday, March 7th, 11 a.m.—I took my friend and neighbour, Mr. Handsley, who is one of the Fellows of this Society, with me this morning.

Not so much tenderness of abdomen, which was still, however, greatly swollen and fluctuating, containing also something solid. Pulse 130, with more volume and distinctness than the day before; countenance bad; coffee-ground-vomiting in considerable quantities. Bowels well relieved the day before with the castor-oil; milk still in breasts.

Vaginal examination.—A substance prolapsed quite exterior to vulva; dry, and feeling as if covered with skin, as an old standing prolapsed uterus usually feels, but which could not be the *prolapsed* uterus, for I could not feel the os uteri at its extremity. Query—the *inverted* uterus? But no, that would scarcely feel dry; besides that, on pushing it up, and feeling carefully round it, I felt the os uteri slightly patent, quite *behind* the prolapsed mass, which itself, as it now lay loosely in the vagina, felt hollow, and as having thinner parietes than the uterus, if inverted at this early period, would have had. Query—the bladder? She had had no difficulty in micturition. I could not push the prolapsed mass above the pelvis.

Continue ammonia, and give wine *ad libitum.*

We now went and called on Mrs. Patchett, the midwife, who had had some experience, and is reasonably intelligent. She reported that the woman was delivered out of bed; that the placenta came *clean* away in about five minutes; and that, after she had got her patient into bed, she felt her body, and thought there must be another child; but relying on the woman's own assurances that she had this swelling *before her pregnancy,* and trusting to the safe manner in which the placenta had come away, she left the woman, satisfied that she had done all for her that could be done. I now felt convinced that there was ovarian disease, and told Mrs. Patchett so.

Tuesday, March 8th.—Received a message this morning that Mrs. R— died last night at 7 o'clock.

Post-mortem examination with Mr. Handsley this afternoon.—A large tumour, looking like black liver, occupying

abdomen. Small intestines, with their peritoneal covering quite black, pushed up towards left hypochondriac region. The large tumour, as large as an adult head, proved to be an unilocular cyst of the left ovary, containing the usual fluid. It was black and gangrenous, like the peritoneal covering of the small intestines. There were also some masses of solid disease of the same ovary. Removed the uterus. It was quite empty, and still rather large; it was not inflamed at all. The prolapsed mass proved to have been the bladder; and the resonance felt at the upper part of the intumescence was well explained by the presence there of the transverse colon, which, distended with flatus, lay across the upper part of the cyst.

This, then, was a case of puerperal peritonitis, commencing about the third day, and involving chiefly the peritoneal covering of an old standing ovarian cyst. For the husband now told me, that he believed there had been a swelling in the abdomen, gradually growing larger, ever since she had her first child ten years before. Her last pregnancy being her fifth, she must, if the husband's statement be correct, which is probable enough, have conceived four times since the commencement of this ovarian mischief. I take it, the cyst was bruised this time by the labour-process, and so became inflamed.

It was clearly a complication irremediable by art at any stage of its progress, and its exact diagnosis especially puzzling to me, when I first saw the patient, as I had not officiated at the actual delivery, and had consequently not, as neither had I previously, had the opportunity of examining the tumour before its inflamed state had rendered percussion insupportable. It is not by any means the first case in which I have met with *healthy* pregnancy and *mature* natural parturition coincident with extensive ovarian disease. That point in the case does not constitute its singularity, for I believe such an association is by no means uncommon. The case proves clearly, however, that such an association may be

immediately dangerous, by introducing a very awkward and almost unintelligible complication, in the event of peritonitis arising after parturition, where the treatment of the disease falls into the hands of a medical attendant who may not have had any previous knowledge of the patient. Until after I had had the opportunity of percussing the abdomen, although I thought the amount of swelling unusual and its shape peculiar, I was inclined to think it must be a dangerously early developed tympanitic condition; and, therefore, at first made but little remark to the women present about it; but finding, later in the case, that there was really little or no resonance, I expressed to them my surprise; and then they said that "*her body had never settled*" after the birth of her child,—a remark which certainly threw but little light on the precise nature of the case, except so far as it served to show that the swelling was not, as I at first thought, an effect of the peritonitis.

I must also, in conclusion, be allowed to say, that, although an exceptional occurrence, this is not the first case of fatal puerperal peritonitis in which I have seen the milk continue in the breasts to the end. Let us not, therefore, rely too much on the presence of the milk as constituting a favorable symptom, or even a favorable *crisis;* for I have also known the milk, the secretion of which had been arrested during the first few days of the disease, *reappear* in the breasts, both in fatal puerperal fever and in fatal puerperal mania, shortly before the termination of the case in death.

I think the case an instructive one in all its points, besides affording an example of a train of circumstances of very peculiar interest, conspiring to obscure what is under any circumstances generally difficult enough—the diagnosis of an abdominal tumour.

My attendance on the case above described was followed in my midwifery practice by such an unusual proportion of febrile diseases of the puerperal state (query—puerperal

fever?), that I think it may be interesting as well as instructive, if I subjoin, as briefly as possible, some account of the whole of the cases attended by me during the months of March, April, May, and June, with which last month these diseases ceased. The following table, with the addition of a few remarks and details, will perhaps suffice to give the reader some idea of a series of cases which occasioned me much painful anxiety and trouble during that whole period of four months. I have thought it necessary to enter in the table the particulars, not only of the cases in which there were diseases of the puerperal state, but also of those, intermediate or otherwise, which were wholly exempt from them. It may thus be seen how little the circumstances of the labour were concerned in the production of those diseases; indeed on this point I have seen quite enough, not only in the present series of cases, but throughout my practice, to convince me of the absolute truth of the following passage in Boivin's 'Mémorial de l'Art des Accouchemens:' * * * "que l'accouchement de quelque genre qu'il ait été, lorsqu'il s'est opéré par les voies naturelles n'influe presque en rien sur la nature des couches. Nous avons vu un grand nombre de femmes qui étaient accouchées naturellement et très promptement, être frappées de maladies fort graves et même mortelles; tandis que d'autres, qui étaient accouchées, soit au moyen de la version de l'enfant par les pieds, soit par l'application du forceps, même celles qui n'avaient pu accoucher qu' après la perforation du crâne de leur enfant, n'avaient pas ressenti le plus leger symptôme de maladie." (Tome i, p. 442).

Although the notion of infection conveyed by myself and communicated by manipulation, would also seem to be invalidated by the fact that so many intermediate cases, where there was much, *even "meddlesome,"* manipulation, presented no unfavorable symptoms whatever, I feel nevertheless that no other hypothesis will explain the facts. It is but just to myself to observe, that having a wholesome fear of the possible effect of my attendance on midwifery

cases after the autopsy of case 1, I took every possible precaution by way of disinfection, such as many ablutions, entire change of wearing apparel, &c., to obviate what I dreaded. The occurrence of diphtheria in cases 19 and 26, that disease being epidemic in the district, would almost favour the notion that the whole series was merely an epidemic: but I am inclined to regard the occurrence of that symptom, which, more especially in case 19, only made its appearance when the more purely puerperal malady was arriving at a favorable crisis, as simply a proof of the force of epidemics.

The column of residences inserted in the Table of Cases will, with the help of the little map appended, facilitate the study of the series of diseases, if viewed as an epidemic.

A TABULAR SKETCH OF MIDWIFERY CASES,

ATTENDED BY THE WRITER IN THE MONTHS OF

MARCH, APRIL, MAY, AND JUNE, 1859.

No.	Residence.	Date of Delivery.	Circumstances of the Labour.		Diseases of the Puerperal State.	Result to Mother.
			Before or during.	After.		
1	Wt.	1859 March 1st.	Very easy, quick labour. *Multiparous.*	...	Third day, attack of peritonitis. Pulse 140; small and weak. Great swelling of abdomen, &c., with acute tenderness on pressure. *Treatment*—Fomentations, with ammonia and stimulants towards the end.	Death on seventh day of lying-in. Autopsy revealed a large ovarian cyst in a state of mortification, with general peritonitis.
2	T.	March 2d.	Average natural labour. *Primiparous.*	...	...	Good recovery.
3	H.B.	March 4th.	Average labour. Ergot given. *Multiparous.*	...	...	Good recovery.
4	S.	March 5th.	Quick, easy, natural labour. *Multiparous.*	...	...	Good recovery.

No.	Residence.	Date of Delivery.	Circumstances of the Labour.		Diseases of the Puerperal State.	Result to Mother.
			Before or during.	After.		
		1859				
5	Gd.	March 9th.	Average natural labour. Ergot given. *Multiparous.*	After-pains severe.	...	Good recovery.
6	A.	March 11th.	Quick and easy natural labour. *Multiparous.*	...	...	Good recovery.
7	Uy.	March 13th.	Average natural labour. *Multiparous.*	...	...	Good recovery.
8	T.	March 13th.	Quick and easy natural labour. *Multiparous.*	...	...	Good recovery.
9	Hg.	March 14th.	Very easy and quick natural labour. *Multiparous.*	...	...	Good recovery.
10	Wt.	March 14th.	Easy natural labour. *Multiparous.*	After-pains severe, from retention of a portion of the membranes.	...	Good recovery.
11	Str.	March 15th.	Hard labour. Delivery with Vectis. *Primiparous.*	...	Abscess of breast in fourth week, from mismanagement of milk. Little or no constitutional disturbance.	Good recovery.

12	Wt.	March 16th.	Languid labour, with presentation of vertex. Delivery by turning. *Multiparous.*	Great hæmorrhage, with vomitings and faintings.	Rigor next day. After reaction, pulse 125, thready and small. Headache; frequent vomitings; great pain, and tenderness of abdomen and of body of uterus. Lochia and milk sufficient. *Treatment*—Opiates and aperients, with fomentations. Next day better.	Good recovery.
13	Mw.	March 18th.	Easy quick labour. *Multiparous.*	Great hæmorrhage; frequent faintings; blindness; and deafness.	Next day, after a rigor, peritoneal tenderness and pain, with tympanitic distension of abdomen, headache, and thirst; hot skin. Pulse 125; full. Milk coming. *Treatment*—Aperients and opiates, with fomentations. This state continued several days, the rigor being repeated more than once.	Good recovery.
14	H.B.	March 26th.	Easy quick labour. *Multiparous.*	...	...	Good recovery.
15	A.	March 27th.	Tardy labour, with head-presentation. Delivery by turning. *Multiparous.*	...	...	Good recovery.
16	T. T.	March 29th.	Easy, natural labour. *Multiparous.*	Severe after-pains, with considerable hæmorrhage.	Third day, fever, with pulse 125, soft, full, but unsteady. Abdominal and inguinal tenderness, with great tympanitis. Lochia and milk right. This state continuing several days with repeated rigors. *Treatment*—Aperients; opiates; fomentations.	Slow, but perfect recovery.
17	A.	March 31st.	Easy natural labour. *Multiparous.*	...	...	Good recovery.
18	Ht.	April 2d.	Languid labour. Ergot given. *Multiparous.*	...	...	Good recovery.

No.	Residence.	Date of Delivery.	Circumstances of the Labour.		Diseases of the Puerperal State.	Result to Mother.
			Before or during.	After.		
19	Ht.	1859 April 3d.	Very languid labour. Delivery with vectis. Child dead, with signs of putridity. Ergot given. *Multiparous.*	...	A very troublesome series of alarming symptoms, commencing the next day. Abdominal and inguinal tenderness; tympanitis; delirium; dysuria; diarrhœa; diphtheria, &c. Arrest of lochia and milk, with pulse ranging from 120 to 145. The more urgent symptoms lasting about a week. *Treatment*—Opiates; fomentations; gargles, &c. &c., according to symptoms.	Slow but perfect recovery.
20	Thy.	April 4th.	Very easy, quick labour. *Multiparous.*	Hæmorrhage.	...	Good recovery.
21	Cx.	April 9th.	Easy natural labour. *Multiparous.*	After-pains severe.	...	Good recovery.
22	Ht.	April 9th.	Back presentation. *Multiparous.* Dead child. *Anencephalian* monster.	...	...	Good recovery.
23	Sw.	April 11th.	Easy, quick, natural labour. *Multiparous.*	...	...	Good recovery.
24	Ay.	April 11th.	Very easy and quick labour. Only two examinations. *Multiparous.*	...	Third day, symptoms of *hysteritis*, with small, sharp pulse, 120. General abdominal tenderness; *fundus uteri* large and tender to touch; &c., &c. *Treatment*—Opiates, aperients, and fomentations. This state followed by many anomalous symptoms, hysteria, pyrosis, &c., for many weeks.	Slow recovery.

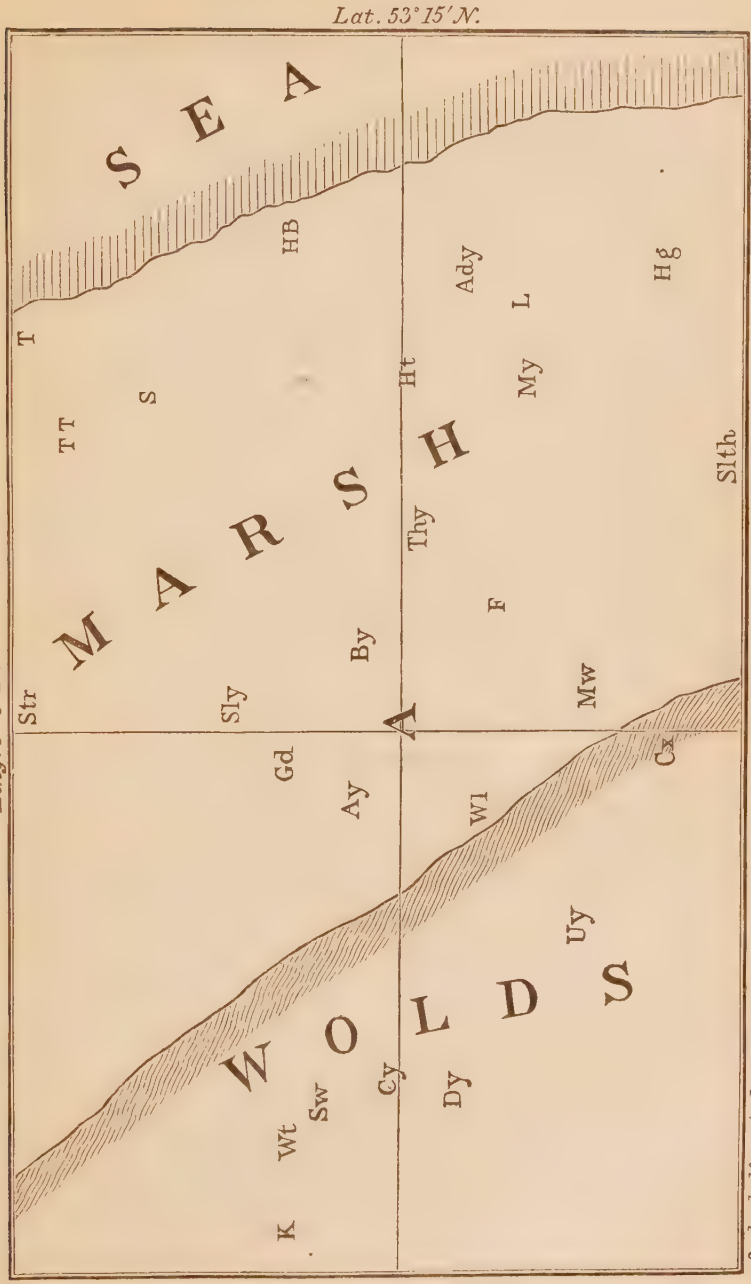
25	Sw.	April 13th.	Rapid delivery, with twins. Excessive œdema of lower limbs. *Multiparous.*	...	...	Good and rapid recovery.
26	Wl.	April 14th.	Woman ill a week with remittent fever. Easy and quick labour. *Multiparous.*	Abatement of fever symptoms.	Return of fever on third day, with introduction of puerperal element. Pulse 130, small. Abdominal tenderness. Followed by *diphtheria*, and several other anomalous symptoms.	Slow, but perfect recovery.
27	A.	April 15th.	Slow labour, natural. Ergot given. *Multiparous.*	...	Slight feverish symptoms during the first week, with pulse over 100.	Good recovery.
28	Str.	April 16th.	Easy, rapid labour. *Multiparous.*	...	...	Good recovery.
29	Ady.	April 19th.	Easy, natural labour. *Multiparous.*	...	...	Good recovery.
30	My.	April 26th.	Easy, natural labour. *Multiparous.*	...	...	Good recovery.
31	Cy.	April 28th.	Easy, natural labour. *Multiparous.*	...	...	Good recovery.
32	T.	May 2d.	Slow labour. Ergot given. *Multiparous.*	...	...	Good recovery.
33	Ht.	May 3d.	Easy natural labour. *Multiparous.*	...	...	Good recovery.

No.	Residence.	Date of Delivery.	Circumstances of the Labour.		Diseases of the Puerperal State.	Result to Mother.
			Before or during.	After.		
34	T.T.	1859 May 3d.	Slow natural labour. Ergot given. *Multiparous.*	...	...	Good recovery.
35	Ht.	May 14th.	Face to pubes. After artificial rectification of position, delivery with vectis. *Multiparous.*	...	...	Good recovery.
36	Dy.	May. 15th.	Average *primiparous* labour. Ergot given.	...	Rigors and fever with abdominal tenderness in second week. Pulse 130, small. Feverish state continuing, there was abscess of breast in fourth week, ending the symptoms by elimination of *materies morbi* (?)	Slow recovery, but perfect.
37	A.	May 17th.	Hard *primiparous* labour. Delivery with long forceps.	...	...	Good recovery.
38	Ht.	May 19th.	Average natural labour. Ergot given. *Multiparous.*	...	...	Good recovery.
39	K.	May 28th.	Hæmorrhage; placenta prævia. Twins, delivery of both by turning. Ergot given. *Multiparous.*	...	...	Good recovery.

40	F.	May 28th.	Easy labour. *Multiparous.*	...	...	Good recovery.
41	Sly.	May 31st.	Easy natural labour. *Multiparous.*	...	...	Good recovery.
42	Slth.	May 31st.	Average *multiparous* labour. Ergot given.	...	In third week feverish symptoms, with pulse 140, small and weak; abdominal tenderness, &c., giving way at once to aperients and opiates, with fomentations.	Good recovery.
43	L.	June 1st.	Easy natural labour. Ergot given. *Multiparous.*	...	...	Good recovery.
44	Wt.	June 2d.	Easy natural labour. *Multiparous.*	...	...	Good recovery.
45	A.	June 9th.	Easy *primiparous* labour.	...	...	Good recovery.
46	T.T.	June 10th.	Easy natural labour. *Multiparous.*	...	...	Good recovery.
47	By.	June 15th.	Easy natural labour. *Multiparous.*	Great hæmorhage.	Fever and abdominal tenderness in second week. Pulse 120, small. *Phlegmasia dolens* in fourth week.	Slow recovery, but perfect.
48	Ht.	June 20th.	Easy natural labour. *Multiparous.*	...	Headache with slow pulse, 60. Many anomalous symptoms, palpitation, hysteria, &c., giving a great deal of trouble.	Slow recovery.
49	A.	June 21st.	Easy natural labour. *Multiparous.*	...	...	Good recovery.

No.	Residence.	Date of Delivery.	Circumstances of the Labour.		Diseases of the Puerperal State.	Result to Mother.
			Before or during.	After.		
50	Ht.	1859 June 27th.	Breech presentation. Premature. *Multiparous.*	...	...	Good recovery.
51	Sw.	June 28th.	Easy *primiparous* labour.	...	...	Good recovery.
52	Sw.	June 29th.	Easy labour. *Multiparous.*	...	...	Good recovery.

MAP OF DISTRICT ROUND ALFORD IN WHICH THE CASES OCCURRED.



Analysis.

Of forty-eight cases of midwifery, attended between the 8th of March and the end of June, including only those attended after the *post-mortem* examination of Case 1, there were ten cases of puerperal disease sufficiently grave to excite considerable apprehension for the result. This is surely a very undue proportion. Although some of them, like Case 1, exhibited inflammatory symptoms, they were all, equally like that case, more or less adynamic in type, and were benefited by stimulant or tonic treatment. As illustrative of the possible effect of peculiar circumstances, in the production or non-production of diseases of the puerperal state, the reader may compare Cases 12, 15, and 39, all deliveries by turning—the first being followed by some alarming symptoms, though brief; the others recovering without any unfavorable symptoms whatever; although the last, a twin case, had the additional complication of *ante-partum* hæmorrhage from placenta prævia. Of the instrumental cases, four in number, viz., Cases 11, 19, 35, and 37, only one, No. 19, was the subject of disease of the puerperal state. All the ten recovered perfectly, *post varias fortunas*. As No. 19 gave me the greatest amount of trouble and anxiety, I will conclude this paper with a report of it in detail. It presents many points of great interest.

No. 19.—April 3d.—At 1 a.m. abundant flow of watery fluid; three pains. Pains then ceased. I arrived at 7½ a.m. No pains whatever; os dilated size of a shilling, very thick and soft. Gave a full dose of ergot at 9¾. Examination again at noon. Os dilating nicely, but no pains felt. Found now that the amnios was entire; the flow therefore "*false waters.*" Ruptured the amnios. After this, slight pains began; but as they were very feeble and insufficient, I passed my hand several times freely round the head, within the uterus, in the hope of exciting better uterine action. There was some good effect from this proceeding. I then applied the vectis, and with some difficulty brought

the head through the os uteri. I then, viz., at 3 p.m., gave another dose of ergot, and waited for the expulsion of the child by the natural efforts. The child was born at 3.45. It was quite dead and pulseless, there being no bleeding from the funis. The lips were blue and livid. The cuticle peeled off the back when the nurse washed it, a sign of incipient putridity.

N.B. The mother, who had been out of health for a few days before the labour, suffering from neuralgia of the face, &c., had thought that she felt the death of the child five days before. Under this strong impression, she had stuck a pin in the almanack at the date. I stayed with her two hours, and left her very comfortable. Pulse full, 70.

April 4th, 10 a.m.—The after-pains have been severe all night, and she has had no sleep. Complains of pain and soreness all over, and of much headache. She is lying on her left side, with her knees drawn up, and she cannot turn over. Skin warm and comfortable. Pulse pleasant, but 126. No appetite. Lochia sufficient, countenance good, no hurry of respiration. There has been no rigor.

℞ Calomel et Opii, āā gr. iij, statim sumend;
et, post semi-horam, Ol. Ricini, ℥j.

The abdomen to be fomented.

5th.—Position as yesterday. A bad night from pain. Easier this morning. Pulse still 126, soft and pleasant. Abdomen full and soft, no tenderness on pressure. Lochia sufficient. No milk as yet. Appetite bad. Complains still of headache, chiefly over one eye—it is the old neuralgia. Bowels well moved yesterday. Skin open and pleasant. No rigor. Respiration good.

℞ Magnesiæ Sulph., ℥j;
Pulv. Ipecac. comp., ℈ij;
Sp. Æth. Nitrici, ℥ss;
Tinct. Card. comp., ℥ss;
Aquæ M. Pip. ad Oss.
M. s. c. ij, 4tis horis.
Sumat haustum anod. (Liq. Morph. acet., ℥j.) horâ somni.

6th.—Much the same as yesterday. Pulse soft, and with

moderate volume, 128. Abdomen very full and very tympanitic; soft, and bearing pressure all over, except in right groin, where there is tenderness. Lies on her back with knees down. Skin cool and open. Countenance good and pleasant. No headache; tongue clean. Bowels have again been well relieved. Some dysuria last night. Complains of vulva being swollen. Warm water to vulva. Turpentine stupes to abdomen.

Rep. Mist. cum Spir. Ammon. Aromat., ℥ss, vice Magnesiæ Sulph.
℞ Camphoræ, ℥ss; solve in
Chloroform., ℥j; adde
Ol. Lini, ℥iij.
Ut ft. linimentum, diligenter abdomini, et inguini infricandum.
Sumat horâ somni haustum anod. ut anteà.

Same day, 8 p.m.—Great alarm, sudden and hasty message. Found her in a hot, feverish state, with diaphoresis. Had been vomiting; and the pain in the abdomen, which had been gradually increasing since I left in the morning, had been much relieved, ten minutes before my arrival, by a copious evacuation from the bladder, and the expulsion of several coagula from the uterus. Abdomen soft and bearing pressure well, though tender, with some hardness on left side. Pulse 140. Head very free from pain and very clear. Countenance good. Very smiling, and inclined for conversation. It is probably a condition of reaction, and not unfavorable. Pergat., and let her take the draught as ordered.

7th, 10 a.m.—Has had a good night. Feels some pain this morning. Abdomen amazingly swollen and tympanitic, but bears pressure well. No soreness now in groins. Pulse 104, very soft and distinct. Warm perspiration all over. Some slight appearance of milk in breasts. Bowels and bladder relieved twice last night. No headache. Gave a turpentine enema, which caused the expulsion of a great quantity of flatus; and the bladder being again relieved, she felt much better when I left her at 11; complaining, however, of thirst and dryness of mouth.

℞ Potassæ Bicarb., ʒij;
T. Card. comp., ℥ss;
Aquæ Menth. Pip. ad ℥vj.
℞ Acid. Tartaric, ʒiss;
Spir. Æth. Nitrici, ℥ss;
Aquæ ad ʒvj.
M. Sumat āā coch. ij in actu efferv., 4tis horis.

Same day, 8 p.m.—Has felt better all day. No milk. Skin hot, with diaphoresis. Not much pain. Abdomen not quite so much distended. Has been slightly delirious all day. Pulse 134. Is very restless and depressed.

Habeat statim Enema Terebinthinæ.

After the enema she felt less full, having again parted with some flatus. Towards 9 o'clock, the pain returning in abdomen, I gave her her anodyne draught, and sent her—

℞ Pil. Galb. comp., gr. v.
Ft. pilula, 4tis horis sumenda.

8th, 10 a.m.—A restless night, having talked a good deal. Pain began again at 6. Found her tolerably easy, but very depressed in spirits. Abdomen not so full. No tenderness on pressure. Less fever. Pulse 140—145; but I think a good deal of this acceleration is due to mental disquietude. Tongue clean. She vomits bile occasionally. Was delirious in the night. The bowels are very loose, the motions coming away in bed, without consciousness on the part of the patient. I, nevertheless, on account of the tympanitic condition, gave again a turpentine enema, which brought away a great quantity of flatus, &c. Left her at noon, expressing herself as feeling altogether better. Abdomen very soft, and nothing like so full. Bowels very loose. The lochia have ceased.

℞ Confect. Aromat., ʒij;
Ammon. Sesquicarb., ʒss;
Tinct. Opii, ℥iss;
Spir. Ammon. Fætid., ʒij;
A. M. Pip. ad ℥vj.
Sumat coch. ij, 4tis horis, cum Pil. Galb. comp., gr. v.

Same day, 8 p.m.—Has had a few hours of refreshing sleep this afternoon, and feels better. No pain in abdomen. and very little distension or tympanitis. Pulse 132. She is talkative and hysterical, inclined rather to cry than to laugh. Has been delirious in the course of the day, having fancies of the nature of *incubus*; fancying she was her own nurse, for example, and that she was lying in two separate pieces on the bed—one on one side and one on the other; insisting that the nurse, who had been rubbing her abdomen on one side of the bed, should go to the other side to rub the abdomen of the other body that lay there. Has some slight return of appetite. The mucous membrane of the tongue is abraded in patches.

Continue medicine, omit the night draught.

9th, 10 a.m.—Has had a good night. Complains of sore throat. It is decidedly *diphtheritic*. There are white patches on left tonsil and on uvula. Abdomen soft, full, and tympanitic. Is not correct in her ideas; is very cheerful. Still has some strange fancies, chiefly on the subject of her own personal identity. Never inquires about her children, or seems to care about them. Naturally a very anxious mother. Pulse 132.

App. Argenti Nitr. tonsillis.

℞ Potassæ Chloratis, ʒj;
Quin. Sulph., gr. xij;
Acid. Hydrochlorici, ʒss;
Tinct. Ferri Sesquichloridi, ʒj;
Aquæ destill. ad ℥vj.

Sumat coch. ij, 4tis horis.

Same day, 8 p.m. — Pulse 120. Throat worse. Is much agitated, and afraid of choking. I decided on staying all night. The throat is very full of viscid mucus, besides being diphtheritic in patches. I ordered her to take as much cold port wine as she could get down. At 12 (midnight) she had vomited several times, and felt her throat much relieved, as well as her flatulent stomach. Pulse 110.

10th, 4 a.m.—Has been sick again. Pulse 106. At

8, pulse 104. At 9, pulse 100. Complains of pains at scrobiculus cordis.

℞ Quin. Sulph., ʒss;
Acid. Hydrochloric., ʒss;
Aquæ ad ℥xij.
M. s. c. ij, 4tis horis.

℞ Mellis, ℥j;
Tinct. Capsici, ʒj;
Acid. Hydrochlorici, ʒj;
Tinct. Myrrhæ, ʒj;
Aquæ ad ℥vj.
M. ft. gargarismus, sæpè utendus.

The application of nitrate of silver to the throat was repeated. It was obvious that along with the access of diphtheria, a critical change for the better was taking place in the puerperal disease.

Same day.—8 p.m. Is better in every respect. Pulse 86. There is milk in the breasts.

11th.—Going on well. Throat still requiring the nitrate of silver. Continue quinine.

12th.—Throat troublesome; pulse natural.

13th.—Throat still diphtheritic. Continue gargle, quinine, and nitrate of silver dressing.

16th.—Throat still diphtheritic, especially about the uvula: tongue bright, glazed, but moist; a small ulcer on it. Is very weak. Soft weak pulse, 88. Appetite bad. Continue treatment.

17th.—Pulse 88, stronger and firmer. Throat and tongue the same.

℞ Potassæ Chloratis, ʒiss;
Quin. Sulph., ʒss;
Acid. Hydrochlorici, ʒj;
Aquæ pluvialis ad ℥xij.
S. c. ij, ter die.

18th.—Pulse 80. No diphtheritic patches visible. Is very feeble; occasionally vomits. Appetite bad.

19th.—Pulse 96. Is sitting up. There has been some

re-appearance of lochia during the last three days. Throat well. Still occasionally vomits bile. Ordered beer instead of wine. Continue medicine.

20th.—Lochial discharge quite fresh and sufficient. Is sitting up. Pulse 90. The beer agrees.

23d.—Sitting up. Pulse 68.

25th.—Her recollection of all that has occurred is very dim and indistinct. She remembers, however, some of her delusions.

I have no further notes of this case. The patient improved gradually, but her convalesence was slow.

As a point of great interest, illustrative of the force of epidemics, I must here mention that a tradesman's wife at Alford, whom I was attending for remittent fever, *not puerperal*, which was complicated with asthenic pneumonia, had well-marked diphtheria, as the pneumonic symptoms declined, exactly at the same time and in the same way as the preceding patient.

This narrative will scarcely be complete without the addition of some information respecting the cases attended in my practice subsequently. Suffice it say, therefore, that in the four months next following, I attended 52 cases of midwifery; viz., in July, 15; in August, 13; in September, 12; and in October, 12=52, with the following circumstances; viz., 6 deliveries with forceps; 2 with the vectis; 4 cases of turning; 2 of incarcerated placenta; 3 cases with stillborn children, of which two were putrid; 1 case of breech presentation, and 1 of twins. And as these 52 cases, with 2 exceptions, recovered without any puerperal complications, I had reason to believe that the contagion, or epidemic influence, or whatever it might have been, that had produced the alarming series of diseases above narrated, had ceased with the end of June. One of the excepted cases, attended on the 15th of August, was one of those with incarcerated placenta—a difficult case, to which I was not called until three hours after the birth of the child. It

was attended with considerable hæmorrhage, from which the poor woman was in a bad state, quite pulseless, on my arrival: it was followed during two or three weeks with a good deal of irritative fever, diarrhœa, and troublesome vomitings. The other case, attended on the 30th of August, an easy labour, with second child, was followed on the third day by a smart attack of ephemeral fever, during the reactive stage of which the pulse was 180. Both these patients had perfect recoveries.

SUDDEN DEATH

FROM

OCCLUSION OF THE PULMONARY ARTERIES,

SEVENTEEN DAYS AFTER PARTURITION.

BY

DRAPER MACKINDER, M.D., F.R.C.S.E., GAINSBOROUGH.

Read July 6th, 1859.

THE establishment of the "Obstetrical Society of London," must be regarded as a great boon, both to the public and to the profession, offering, as it will, a healthy stimulus to exertion, and eliciting at its meetings such an amount of practical knowledge as could not otherwise be obtained in a form advantageous to busy working men. Moreover, it will form a court of reference in cases of difficulty, or of death from causes over which the practitioner in attendance could not exercise control, and thus perhaps save the reputation of a worthy individual. Every one knows the awful nature of death happening to a woman in childbed! Sudden death is at all times alarming, but death at the exciting season of parturition is especially so, and to a young practitioner most unfortunate, since his welfare is often deeply prejudiced by erroneous reports.

In the practice of my late partner, Mr. F. A. Lowe, and myself, more than four thousand cases of midwifery have been attended; but never until lately has a case of sudden death occurred, so long as seventeen days after delivery.

Two such I have recently had, and within a very short periodof each other. I mentioned them to Professor Simpson, at the meeting of the "British Medical Association,"

in July last, and he wished me to publish them, stating he was then investigating similar cases.

The first happened on the 22d of February, 1858. The subject of this sudden arrest of the circulation was the wife of a respectable, but not wealthy, tradesman. Her age thirty-two, rather anæmic; her first child was two years and a half old, and her second seventeen days; her labour having been natural, easy, and of five hours' duration. There was dropsy of the cord. Excepting an excessive secretion of milk, there was nothing which required attention afterwards. On the 21st of February, she sat up to tea and supper, apparently well, and in good spirits, though she complained of a little pain in her left side and shoulder, and seemed fatigued when she retired to bed. At four on the following morning, she gave the child the breast, commenting playfully on the abundant supply of milk; and a few minutes before five she rose up convulsively, said she was choking, and breathed her last.

Post-mortem.—In consequence of the suddenness of the death, the cause of which was suspected, I was allowed to make a *post-mortem* examination, and found a large branching fibrinous plug, completely stopping up the right pulmonary artery and its immediate ramifications, while the entrance to the left pulmonary artery gave lodgment to a large and tolerably firm concretion. The heart was rather thin, and the lungs were slightly congested; but there was no further trace of disease about the body. The uterus and its appendages, as far as I could see, were perfectly healthy.

Case 2.—On the 27th of June, 1858, my assistant, Dr. J. C. B. Smallman, attended the wife of a stay-maker, of impoverished circumstances, in her sixth confinement. Her age was twenty-nine: her general health not good, she being at all times weak and exsanguine. Like the former case, two years and a half had elapsed since her preceding accouchement; this labour, as was usual with her, being easy, and lasting only one hour and forty minutes. For a few days this poor woman went on well; she then imprudently went

down stairs and exposed herself to cold by assisting to paper a room; after which she suffered from pain in the abdomen and slight diarrhœa, the lochia becoming offensive. Warm water injections to the vagina, and a little opium per orem, afforded considerable relief; and, though very weak, she appeared to do well, until about twenty minutes before her death, when she was suddenly seized with great difficulty of breathing, violent suffocation, gasping, jactitation, and cold clammy sweats. Two hours before she died, this patient was visited by Dr. Smallman and myself, when she seemed comfortable, and afterwards ate a good dinner.

Æther, Ammonia, and brandy were liberally administered. Much to my regret, a *post-mortem* was not allowed in this case; we are therefore left in the dark as to the actual pathological condition; the probabilities, however, being in favour of the plugging up of some important but smaller vessel than those found obliterated in Case 1.

I need scarcely say that more interesting, more exciting, and more awfully alarming cases than the above cannot well be imagined, and I shall be amply rewarded for the time occupied by this communication, if the reading of it should cause a deep, searching, scientific investigation of the whole subject by some Fellow of this Society who may possess the necessary time and ability.

Many cases of recorded "heart-disease" may have been death from occlusion of some arterial or venous conduit, or from the imbibition of air, and in no way dependent on any organic change in the heart itself.

Her Majesty the Queen, as well as the meanest of her subjects, may be the victim of this dreadful accident, and a loving nation be plunged into mourning at the very moment when preparations for great rejoicings are being vigorously conducted.

Whatever may be the secret of this dire calamity, let us hope it is not beyond the power of human ingenuity to reveal, and the thanks of a civilised world will be due to him who first indicates the means of saving a poor parturient woman from such an unhappy end.

A CASE OF LABOUR

COMPLICATED WITH A

FIBROUS TUMOUR OF THE UTERUS.

DELIVERY BY LONG FORCEPS, AND SUBSEQUENT REMOVAL OF THE TUMOUR.

BY

W. O. PRIESTLEY, M.D.,

LECTURER ON MIDWIFERY AT THE GROSVENOR PLACE SCHOOL OF MEDICINE, ETC.

Read July 6th, 1859.

During the summer of 1858, a professional friend requested me to see his wife, who had, according to his account, been suffering for some time past from menorrhagia, and was gradually losing her health in consequence. The menstrual periods were not only inordinately profuse, but latterly the intervals had become much shorter than usual, and the sanguineous discharge recurred every fortnight or three weeks, being at any time easily provoked by fatigue or over-exertion.

The subject of these symptoms was thirty-seven years of age, of a highly nervous and hysterical temperament. She was the mother of two children; since her last confinement she had aborted at an early period of gestation, and had at that time lost a large quantity of blood.

On making an examination by the vagina, I found the cervix uteri somewhat indurated and enlarged, and the posterior and upper part of the cervix, at its junction with the body of the uterus, was nodulated and irregular. The os uteri was slightly patent, but not ulcerated. Beyond this, nothing further was elicited at the time, and the treatment adopted was chiefly directed to improve the general health; astrin-

gent injections being used at the same time as local applications.

Our patient did not improve, however, under these means; and suspicion became strengthened that the source of the bleeding was some polypoid or fibroid growth in the interior of the uterus. At length, one day, on making a careful examination of the os and cervix uteri with the speculum, a small vesicular polypus, which had not previously been in sight, slipped out of the cervical canal, and appeared at the os tincæ. On ascertaining this, a sponge-tent was introduced into the os uteri, and when the cervix was dilated, a cluster of small polypi were found growing in the canal of the cervix. These were removed by a scraping instrument suitable for the purpose. There was no evidence of a larger polypus or fibroid growth in the uterine cavity proper, but there was a nodular projection of small size in the posterior wall, at the upper part of the cervix, where it unites with the body of the uterus.

A certain amount of subacute inflammatory action followed the operation, but this slowly disappeared, and the patient almost immediately afterwards became pregnant.

The period of gestation was one of great discomfort; unusual difficulty and pain being experienced in standing or walking. Frequently there was considerable leucorrheal discharge, and in the last half of pregnancy, the fœtal movements were so uncommonly forcible and constant, as to give rise to great annoyance, and produced an impression on the mother's mind that some unusual complication might be expected at the time of delivery. For some days previous to the supervention of labour, spurious pains were experienced at intervals. They generally came on severely each evening, and rest was only procured by taking some sedative draught.

On the night of the 2d of April, 1859, about half-past nine, uterine contractions set in with some severity, and I was summoned soon after. The lady's husband informed me that labour seemed to have begun in earnest, and that the liquor amnii had already escaped. He further informed

me that on making an examination he had discovered an anomalous mass lying inside the uterus against the posterior wall, but whether it was a portion of the placenta or not, he was unable to decide.

On making an examination I found the genital passages relaxed; the os uteri presenting the form of a transverse fissure with thick fleshy lips, and perfectly dilatable. The head presented with its occiput to the left acetabulum; and about an inch from the margin of the os uteri, within reach of the finger, lay the mass described to me as occupying the posterior wall of the uterus. It had a flattened form, being laid against the uterine parietes, and was everywhere firmly adherent. Only a portion of it could be examined with the finger, and it was impossible to make out at this time the extent of its surface, but it gave me the impression of being the lower margin either of the placenta or some other large and flattened body. The structure was harder than placenta, but I thought at first it might be an indurated and diseased portion of it.

There was no hæmorrhage, however; nor had there yet been any; and after watching the effect of the pains for some time and finding no progress, I lay down to sleep in an adjacent room until my services should be required. I was not called until seven o'clock in the morning, when I learned that strong pains had continued at regular intervals all night, but had become feebler as morning approached. A period of comparative rest now occurred; pains only recurred at long intervals for the next thirty-six hours, and no change was observable in the condition of the passages. On Monday, the 4th instant, the patient complained that the fœtal movements had become much feebler than usual; and she was apprehensive that the child was suffering from the long delay. The pains came on again in the evening of the same day, and continued with great severity and without long intermissions throughout the subsequent night. No effect, however, was produced on the os uteri; and, as morning advanced, I became convinced that, notwith-

standing the force of the uterine contractions, the labour was making no progress whatever.

The head could be felt some little distance within the os uteri, and the cranial bones overlapped with each pain, making it evident that some impediment prevented the descent of the head; the only effect of the uterine contractions being to bring the uterus with its contents lower in the pelvis.

The suffering of the patient was so great early on Tuesday morning, that at her own earnest request, I gave her some chloroform, but did not push it so far as to produce entire insensibility.

During the time she was under chloroform, I was able to make a more complete examination, and satisfied myself that the flattened mass above the posterior lip of the uterus was not a portion of the placenta, but was the lowest extremity of a fibrous tumour, which offered an obstruction to the descent of the head. The strength of the patient was now well nigh worn out; and being more certain as to the nature of the complication, I was convinced the natural powers were insufficient to complete the case, and that some artificial assistance must be afforded. The position of the head in the pelvis would have rendered turning hazardous; the hand could not have been introduced without unjustifiable violence being employed; but I felt no doubt, from the dilatable condition of the os uteri, that I should be able safely to put on the forceps, although to apply them they must be passed inside the uterine cavity. On suggesting a trial of the forceps to the lady's husband, I found him willing to leave the choice of measures entirely in my hands; but as he could not divest his mind of the danger which he supposed must attend the use of the forceps under such circumstances, I recommended a consultation, and Dr. Murphy gave me the benefit of his advice in the case. Dr. Murphy agreeing with me as to the nature of the obstructing cause, thought it might possibly be worth while to wait three or four hours longer, and in the mean time exert such pressure over the body and fundus of the

uterus as would assist the muscular efforts; endeavouring at the same time to facilitate relaxation by a certain amount of artificial dilatation. He concurred in the opinion that the forceps carefully introduced might be employed with safety, and should at least have a trial, if his suggestion proved useless.

Again three hours elapsed, but without result; there was no improvement, the only change was that the head and uterus seemed more firmly pressed down in the pelvis, and the bones of the cranium overlapped yet more than before.

The patient therefore being first placed under the influence of chloroform, I proceeded to apply the long forceps. Their introduction was effected easily, and they locked without much difficulty. The extraction of the head was not, however, so readily accomplished. At first it seemed likely to resist any moderate amount of force employed; and, although I expended considerable strength in direct traction, according to the axes of the pelvis, apparently not the slightest impression was made on its position. I was encouraged to persevere, however, by finding that I did not pull the entire uterus lower in the pelvis, and I had at last the satisfaction of feeling the head advance little by little,—clear the os uteri, and at last sweep over the perineum. The child gasped almost immediately; but now another difficulty presented itself. The shoulders, as they descended, became impacted just as the head had done, and neither the natural powers nor any assistance I could render seemed capable of disengaging them. After a considerable interval, however, which I employed in exerting as much traction upon the neck of the child as I thought justifiable—whenever a pain recurred, the resistance was overcome, and the birth of the child terminated.

The child was stillborn for some time after its expulsion, but it was at length fully resuscitated, and seemed doing well until the following morning, when it was found dead in the nurse's bed.

The placenta was thrown off, and removed without delay.

On making an examination afterwards, I found that no injury had occurred during the process of delivery, either to the vagina or perineum, but hanging out of the os uteri was a tongue-shaped, fleshy substance, two or three inches in length. This I traced upwards, and found to be a tail-like portion of a flat, fibrous tumour situated in the posterior wall of the uterus. It was adherent by a broad surface at its upper extremity, and I deemed it best not to meddle with it immediately, but be guided as to after-interference by the subsequent progress of the case.

Hæmorrhage after delivery was more than naturally profuse, but not to such an amount as to endanger the safety of the patient. She progressed favorably for some days, but at the end of a week began to complain of severe dragging pain in the pelvis, accompanied by dysuria. The pain increased to such an extent that sleep could only be procured by taking opiates, and these were followed by most distressing sickness as soon as the anodyne effect had passed. On making an examination by the vagina it was found that the uterus, while undergoing the process of involution, was gradually separating and throwing off the fibrous tumour which had obstructed labour, a large mass now hanging out of the os uteri. There was no odour of decomposition, and the attachments of the tumour were yet extensive. I thought it better, therefore, to leave the further enucleation to nature, and simply directed the vagina to be washed out frequently with water.

At last the tumour appeared at the vulva, and as the bearing down pain was by this time well nigh intolerable, giving rise to great constitutional irritation, I determined to remove it. The day fortnight therefore, after delivery, I put the chain of the écraseur round a constricted portion, which seemed to form a line of demarcation between the tumour and uterine tissue, and, slowly tightening it, at length effected the excision. The bleeding did not at first promise to be more than very slight, and as I had received a hurried message to attend another patient, I left the lady in her husband's charge soon after the operation, promising

to return shortly. When I did return, in less than an hour, I found our patient blanched and almost fainting from loss of blood. I was informed that an oozing hæmorrhage had been going on almost since I left, and that cold or other styptics had no effect in checking it. I immediately, therefore, emptied the vagina of some small clots which had formed there, and plugged it firmly. Stimulants and beef tea were given freely, but the patient did not soon rally, and although there was no apparent hæmorrhage going on, syncope continued. The incessant restlessness and tossing about which occurred at this time caused us much apprehension, and Dr. Rigby was good enough to see the lady with me. We agreed that I should remove the plug, which had now been in position three or four hours, and ascertain if any internal hæmorrhage was going on into the yet enlarged uterus. On removing the plug,—beyond a small clot in the uterine cavity,—there was no internal hæmorrhage, and after completely clearing the uterus I replaced the plug. After this the patient's pulse began to improve, and the symptoms of collapse soon passed away, leading to the belief that the prolonged syncope was perhaps, to some extent, caused by the small coagulum irritating the uterine cavity.

The following day all was going on well, and the plug was removed, without any recurrence of the hæmorrhage. Henceforward the patient progressed favorably. The catheter had to be introduced whenever the bladder filled, no urine being voided without its aid. More than once in the fortnight following the operation, fever, with rapid pulse and restlessness, caused us to entertain fears on the lady's behalf, but these symptoms always disappeared, and were followed by no bad results. A draught of henbane, with camphor, was the only anodyne that could be borne, and this was generally sufficient to procure sleep, with abatement of the fever-symptoms.

The lady has, since her confinement, been sent to the country to facilitate her recovery, and, although not very strong, is now occupied as usual in her home duties. The uterus is still somewhat enlarged, and the posterior lip is

shortened and corrugated, arising from the fact that a portion of it was amputated along with the tumour. There is yet also much relaxation of the vagina, and a persistent leucorrheal discharge.

The tumour removed is flattened in form, and not unlike a small placenta. It measured about four inches across, and one inch in thickness at its centre. Since the operation it has shrivelled from the action of the spirit, and seems much smaller than at that time. Near its centre is an eminence, which appears to be a portion of the labia uteri, removed with the tumour, as it is covered with squamous epithelium. Close to this may be seen the line of incision made by the écraseur, and which seems a much smaller surface than was actually divided, on account of the tissue being compressed by the chain of the instrument. The consistence of the tumour was much the same as the walls of a gravid uterus. Microscopically, it was found to consist mainly of colossal fibres, like the muscular fibres of the pregnant uterus, and it thus differed, to some extent, from the texture of fibrous tumours in the unimpregnated womb, which, according to my experience, are composed chiefly of fibre cells, with wavy, fibrous tissue—few muscular fibres, properly so called, being present.

Remarks.—The case detailed is interesting in several aspects.

1st. I have every reason to believe that, at the time conception occurred, there was no tumour of considerable size in the uterus. Just before this the cervix was dilated; and, after the small polypi were removed, a careful examination, simultaneously externally and internally, afforded no evidence of enlargement of the body and fundus of the uterus. A hard nodule was found, however, in the posterior wall, at the upper part of the cervix, probably not larger than a hazel nut, and it was here that the flat fibrous tumour obstructing labour was situated. It seems fair to conclude, therefore, that the tumour grew in a great measure during pregnancy, and this is confirmed by its great similitude in structure to the walls of the gravid uterus.

2dly. It is a rare instance in which the first stage of labour was obstructed by a fibrous tumour, the peculiarity in its shape and situation preventing the fœtal head descending on the os uteri, and thus indefinitely prolonging labour. Intervening, as it must have done, at first between the sacral promontory and the child's head, it was not sufficiently large or unyielding to prevent the head entering the pelvic cavity, but resisting the dilatation of the lower segment of the uterus, the womb and uterus were thrust downwards before the fœtal head, and all were impacted together in the cavity of the pelvis.

3dly. When the condition of the patient rendered delivery imperative, it became necessary to relinquish the hope that the resistance would be overcome by the uterine contractions, and to determine on the most expedient operation. The want of space being considered as contra-indicating turning, forceps were employed as an alternative for craniotomy, and a living child produced. The forceps to be introduced had, contrary to usual practice, to be passed within the os uteri, but the great dilatability of the os encouraged the belief that they might be used without injury, which was subsequently found to be the case.

4thly. The enucleation and subsequent removal of the tumour, the circumstances attending the operation, and the ultimate recovery of the patient, are features of much interest, and complete the history of the case.

I may add that an impression remains on my mind, that had the tumour been severed more slowly by the chain of the écraseur the hæmorrhage might have been less considerable, and the result in this case by no means diminishes my confidence in the efficiency and safety of the instrument, when carefully employed.

A CASE

OF AN

OVARIAN CYST,

COEXISTING WITH PREGNANCY,

WHICH RUPTURED SPONTANEOUSLY TEN DAYS AFTER LABOUR.

BY

CHARLES CLAY,

EXTRA-LICENTIATE OF THE ROYAL COLLEGE OF PHYSICIANS; LECTURER ON MIDWIFERY ST. MARY'S HOSPITAL, MANCHESTER, ETC.

Read July 6th, 1859.

Mrs. C—, æt. 30, the wife of an inn-keeper at Sheffield, applied to me four years ago by the advice of her medical attendant, in consequence of an abdominal enlargement, that had then existed for a considerable time, and which he pronounced to be an ovarian tumour. Mrs. C— had been married twice; her first husband lived about twelve months after marriage; she was then a widow for a year and a half; then married the second time, and about six months after, the present enlargement became evident. It was hoped that she was pregnant, never having had any children previously. On examining the case carefully, I found no proofs of pregnancy at all, and fully agreed with her former medical adviser that it was a moderately large ovarian cyst, springing from the left ovary. I advised her not to have it meddled with for some time, at least not until her burden became very seriously troublesome, and her general health considerably impaired by it, which at present was not the case. I saw her again about a year after; and, though the tumour had evidently increased in size, yet its growth had been extremely slow, and her general health continued to be good. I still

advised longer delay, but it was with considerable reluctance she consented; and, in fact, only did so, on my impressing her with the fact, that tapping was very seldom followed by cure, and that the greater probability was, when once tapped the sac would rapidly refill, requiring the operation to be frequently repeated, which would cause great emaciation, until death closed the scene. Thus the case was allowed to progress until April, 1859, or about four years from its apparent commencement. I found her now immensely large, the digestive and respiratory functions seriously interfered with, and the general system suffering from emaciation, so that I felt it my duty to advise immediate tapping. My patient, however, was determined in her own mind to have the tumour removed by extirpation, having been in company with other patients of mine that had recovered after that operation. I promised to tap, and then be led by circumstances as to my future movements. I tapped her on the 5th of April, and removed sixty pounds of viscid, coffee-coloured fluid. Notwithstanding this large amount discharged, I found two tumefied masses still remaining; quite distinct from each other—one situated above the pubes, firm and solid to the touch, and of considerable size; the other less in size, with thinner walls, and evidently containing fluid, in fact an ovarian sac, situated in the left iliac region, and in which the fluctuation was very distinct. Considering I had done sufficient for one day, and not having the stethoscope with me, I had her placed in bed, with directions to be kept quiet. I called to see her on the following day, and, on applying the stethoscope, was no little surprised to find evidence of a distinct fœtal circulation in the larger remaining tumour. I had some difficulty in convincing her she was pregnant, and having no clue to the period to which she had advanced, save the size, I judged her to have completed the eighth month. Under these circumstances, I advised her to return home as soon as she was able, and to wait the issue of her confinement, before any other means were adopted as to the treatment of the remaining cyst. Consequently, she returned home about a fortnight after tapping. Her hus-

band, however, felt a wish she should be confined under my superintendence. Hence she returned to Manchester in the first week in May, and on the 12th of May was delivered of a full-sized male child, no particular circumstance occurring in connection with the labour. When the uterus was fairly emptied of its contents, I proceeded to examine the abdomen, and could distinctly trace the walls of the large sac (previously emptied) as well as the remaining cyst, still occupying the left iliac region, and, at this time, as large as a moderate-sized ox-bladder.

The case did extremely well for the first ten days after delivery, but I fancied the untapped cyst increased in size; but probably I might have mistaken for growth its apparent prominency from the retraction of the abdominal parietes. On the completion of the tenth day after delivery, I was summoned hastily to my patient, who was suffering from severe pains about the neck of the bladder, and was quite incapable of passing urine. I found the belly swollen, hard and tense above the pubes, and no trace of the tumour in the left iliac region. I immediately passed the catheter, and to my surprise drew off nine pounds of a greasy, chocolate coloured fluid, having a very faint urinal smell, its discharge giving great relief to my patient. After which, I again examined the abdomen and found the left iliac tumour had entirely disappeared. It then became evident that the second tumour, or cyst, had spontaneously ruptured and discharged its contents, either along the ureter and then through the bladder, or directly through the walls of the bladder itself. For fourteen days I passed the catheter twice every day, the bladder having no power to empty itself, and each time from three to four pints of fluid passed out—at first dark coloured and of slight urinal smell, but gradually becoming clearer, and free from colouring matter. About the eleventh day of passing the catheter, the bladder began to act partially, the fluid being nearly perfect urine; and by the fourteenth day the catheter was no longer necessary.

In the beginning of June every symptom of uneasiness had entirely vanished. The sac did not show any tendency

to refill; the general health rapidly improved; suckling went on favorably; and by the middle of June she appeared sufficiently well to return to her friends, which she did about the end of the month, in as good a condition of health as could possibly be expected. She was recommended to keep up considerable pressure, by abdominal bandages, for some time to come.

Up to this date, she has continued to improve in every respect.

The peculiarities of this case are the supervention of pregnancy on extensive ovarian disease, and the rupturing of the ovarian sac spontaneously, either into the left ureter, or directly into the bladder. So favorable a result to such a rupture could scarcely be expected, as it appears almost impossible a rupture should occur in either place without involving serious mischief in the peritoneal cavity. Since 1842 I have diagnosed nearly two thousand cases of ovarian disease, and have extirpated ninety-three ovarian tumours, but in the whole of that experience I have only seen two cases of pregnancy coexistent with extensive ovarian disease.

In one case, which I published some years ago, the ovarian disease supervened on the pregnancy. This case was tapped just before the end of the eighth month. She was afterwards delivered at the full period, and two months from delivery had the tumour extirpated. The patient recovered well from all, and has had three children since, one boy, and two girls; showing clearly that both sexes may be produced from one ovary. In this case, no trace of ovarian disease existed in the first two months of pregnancy.

In the case above related (Mrs. C—'s), conception must have taken place long after the opposite ovary had been extensively diseased. Indeed, having been married twice, and so long a period having elapsed without any indications of pregnancy, she had ceased to hope for a family.

The rupture of the smaller sac is remarkable, as I before observed, in respect that the line of rupture did not extend further than to secure the discharge of its contents without

communicating with the abdominal cavity. Whether this communication was through the ureter or directly into the bladder it is difficult to decide; but if I might venture an opinion, I should incline to think it took place near the entrance of the ureter into the bladder. Had it been higher in the ureter, or directly through the walls of the bladder elsewhere, the consequences would have been much more serious, and in all probability would have involved the peritoneal cavity.

TWO CASES

OF

CRANIAL BLOOD-SWELLING;

WITH

REMARKS ON THE NATURE OF THESE TUMOURS.

BY

EDWARD RIGBY, M.D., F.R.C.P.,

PRESIDENT OF THE SOCIETY.

Read July 6th, 1859.

Two cases of cranial blood-swelling having recently occurred to my notice, I venture to offer to the Obstetrical Society a few remarks respecting the nature of these tumours, and the varieties under which they present themselves.

Mrs. A—, a robust, healthy woman, of about twenty-eight, was confined, on the 29th of March, of a fine, living, male child. Her first labour was perfectly natural, and without any peculiar difficulty. In this, her second labour, the os uteri was fully dilated when I arrived, the straining pains were fairly vigorous, chloroform was used, a few powerful efforts brought the head quickly through the os externum, and the rest of the labour followed naturally. Nothing unusual was observed on the head of the child, beyond a slight amount of that elongation which is so frequently seen in new-born children. On the third day, two soft convex tumours of the scalp, as large as the third of a full-sized orange, were discovered, one on each parietal bone near the vertex, the sagittal suture running equidistant between them. They were circular; the summit of each convexity appeared to present an elevation of nearly half an inch above the ordinary

level of the head; they were but slightly elastic, and evidently insensible. On passing the finger around their margin, a firm ring could be felt like an edge of bone, giving the sensation as if the parietal bone beneath the tumours was wanting; more careful examination showed, however, that it was not defective, but formed the floor of each tumour. There was no distinct fluctuation, nor any perceptible trace of pulsation; the scalp was natural, nor did pressure produce any apparent inconvenience or suffering to the child.

On the fourth day the tumours were somewhat larger and more tense; from that time until the ninth day they remained stationary, except that within the last day or two they had become somewhat softer. On the tenth day they were evidently smaller, and the looseness of the scalp over them, from diminished tension, was more distinct.

Eighteenth day.—Tumours still smaller, but if anything more tense; fluctuation is distinct in each.

Twenty-third day.—Tumours scarcely a third their original size; they are more loose, and seem to consist chiefly of a loose, thickened scalp.

Twenty-fifth day.—The left tumour has nearly disappeared; the right, although smaller, is still tense, and with distinct fluctuation.

Twenty-ninth day.—No trace of the tumour on the left side, the scalp is smooth and natural; the right tumour is very small, but is still somewhat tense, and evidently contains a little fluid. I saw the child in about a fortnight afterwards; the tumour had entirely disappeared.

In a week after the birth of this child, another was brought me with a similar tumour, but somewhat larger, occupying the back of the head, and its lower edge crossing the occipital fontanelle, its upper one reaching almost to the vertex. It had been born two days after the birth of the other child; and its mother had sent it to me in great distress, having been informed by her medical attendant that it was a tumour communicating with the brain, that it was of a most dangerous character, and that the child, if it sur-

vived, which was extremely improbable, would be an idiot. A slight examination sufficed to show that it was a cranial blood-swelling; and I was enabled to relieve her mind with the assurance that there was no danger, provided she would allow nothing to be done to it; and that in the course of two or three weeks it would rapidly diminish. In about a month afterwards, I heard that it had gradually subsided and disappeared, as in the preceding case.

Although these cranial blood-swellings cannot be said to be of common occurrence, yet they come sufficiently often under our notice to be tolerably familiar; still, however, they do not appear to have excited much attention, and, as in the second case which I have described, they have been frequently mistaken for hernia cerebri, an exceedingly rare as well as dangerous malformation, and which, as far as I know, never occurs on the parietal bone, but always over a fontanelle or a suture, as in those cysts or sacs of fluid which are occasionally, though rarely, met with on the heads of new-born children, and which are analogous to the spina bifida tumours of the vertebral column.

On opening these cranial blood-swellings, they are found filled with a dark, semi-fluid blood, beneath which the bone is healthy; this collection of blood is usually beneath the scalp and the tendinous aponeurosis of the occipito-frontalis muscle, the bone being covered by its pericranium.

Sometimes, though more rarely, the pericranium itself is elevated by the collection of bloody fluid. Besides these two forms, other modifications of cranial blood-swelling have been described, but if they really do occur, they are of exceeding rarity. Thus, Velpeau has endeavoured to distinguish cranial blood-swellings into five species, according to the tissues between which the accumulation is situated; *first*, between the scalp and aponeurosis of the occipito-frontalis muscle; *secondly*, between the occipito-frontalis and pericranium; *thirdly*, between the pericranium and bone; *fourthly*, sanguineous tumours of the diploë of the skull; and *fifthly*, those between the skull and dura mater. I am inclined to think that a more practical division of these tumours would

be into those where the collection of fluid is above or below the pericranium; the distinction between Velpeau's first two divisions—viz., whether it is above or below the aponeurosis of the occipito-frontalis muscle—is of no practical value, and cannot be distinguished during life; but with those cranial blood-swellings, where the accumulation is between the pericranium and the bone, the case is different, since a thin deposit of bony matter has been known to form upon that portion of the pericranium which was separated from the skull, and thus a permanent enlargement has been produced. As to the other forms of sanguineous tumour affecting the cranium itself, or between it and the dura mater, I confess I know nothing; at any rate, tumours of this character do not belong to our present subject.

With regard to the *cause* of cranial blood-swelling I can offer but little else than negative information. It was supposed by the late Professor Naegele to depend on a state of the vessels of the cranium analogous to the aneurism by anastomosis, but I am not aware that he verified this theory by actual observation; indeed, I have every reason to believe that he had no opportunity of practically examining these tumours, the children in every case, as also in my own practice, having been remarkably healthy. But even negative information respecting the cause of these tumours is not unimportant; it has been said that they are the results of severe pressure on the head during labour, or from injury produced by the forceps; the incorrectness of this assertion is proved by the fact that it occurs after the easiest and quickest labours. Thus, in the two cases which I have the honour to lay before the Society this evening, neither of the mothers were primiparæ, nor were the labours long or difficult; indeed, I cannot recollect a single case of cranial blood-swelling coming under my own knowledge, where there had either been difficulty or protraction of the labour; the best answer, however, to this assertion is, that it has occurred after a presentation of the nates. With regard to injury from the forceps, I have never seen or known of a case of cranial blood-swelling where this instrument had been used.

Great misapprehension has been entertained by several authors respecting the progress of these tumours; it has been stated that much constitutional disturbance would be set up, if this accumulation of blood, or bloody fluid, were allowed to remain; that it would become putrid; that fever would result; that there would be danger of ulceration, sloughing, &c.; and hence it was recommended to open these tumours and evacuate their contents at an early period, before the above-mentioned changes had had time to take place. Mercurial frictions have also been recommended, in order to produce absorption. The success of these various modes of treatment has been anything but encouraging; sloughing, unhealthy discharge, serious constitutional disturbance, disease of bone, &c., having followed the very means which had been adopted to prevent their occurrence. The celebrated Gölis, of Vienna, recommended that these tumours should be opened by caustic, but the result was unfavorable. It may therefore very naturally be asked what is the treatment of these tumours which Professor Naegele practised with such uniform success, and with which I have been equally fortunate? I would answer that it is of the simplest kind—*do nothing*. As long as the infant is healthy, the changes which I have above described go on with perfect regularity; and, by the time that the child is a month old, the tumour will have entirely disappeared.

ON THE

INDUCTION OF PREMATURE LABOUR

IN A

CASE OF DISTORTED PELVIS.

BY

J. H. TROUNCER, M.D. Lond.

Read Oct. 5th, 1859.

Mrs. B—, an intelligent person, of rather thin, spare habit, and pale complexion, thirty-nine years of age; about five feet in height; stoops slightly, and has a slight curvature of the spine, which was not known to exist when young. She has had eight children, the first of which was born when she was twenty-eight years of age.

Her three first labours were natural, she was unassisted, the children are living. The fourth required assistance, on account of a false presentation; turning was resorted to, but the child died.

The fifth labour commenced with head presentation, but nature was unequal to the task; the forceps were used by a physician of some note, in conjunction with the practitioner; and, after repeated attempts, she was delivered of a dead child. Considerable distortion of the pelvis now existed.

I attended her for the first time, during her sixth accouchement, in January, 1857. The presentation was natural, the head resting on the brim of the pelvis, but refusing to enter the cavity under the efforts of continued severe expulsive pains; the forceps were had recourse to, and, with the assistance of my friend Dr. Tyler Smith, after much exertion, she was delivered of a dead child; severe flooding followed, and it took some time to restore her health to the normal state.

It was at once decided that, should she become again pregnant, it would be expedient to induce premature labour. Accordingly, having obtained the sanction of herself and friends, I commenced the operation when the eighth month of her seventh pregnancy had nearly arrived.

The practice I adopted was, in effect, similar to that I had tried with success in other instances; and which I first carried out at the suggestion of Dr. Tyler Smith, six years ago, in a case in which a woman had been delivered of six fine children, all of which had died a day or two before birth. In that case, I had a large tub elevated to the ceiling, containing alternately several gallons of hot and cold water; by means of a flexible tube connected to another passed into the vagina, a continued stream of hot and cold water was alternately directed to the neck of the uterus; the labour came on gradually, and a very healthy girl was born without assistance, and is at present a very interesting trophy of the practice. The only difference in the present case was the use of a powerful syringe sometimes, and at others one of the convenient flexible hand-syringes; eight days elapsed before labour-pains were fully established; the arm presented. Dr. Tyler Smith again assisted me, the child was turned, and we had the satisfaction this time of saving both mother and child.

On the 13th of June, 1859, she had again reached the eighth month, within a few days, of her eighth pregnancy, when I resorted to the same process; but this time passed a long flexible tube directly into the neck of the uterus, and when within reach, inserted my finger into the uterus, from time to time using a little circular pressure. On the fourth day from the commencement, the os uteri was fully dilated, although the pains had been trifling; I found it to be a shoulder presentation, and at once proceeded to turn; the membranes still being intact, I was enabled speedily to secure the feet and bring the body through the passage; the cord was unfortunately round the neck, and, in spite of considerable extension force, the head refused to pass until the

life of the child was sacrificed by the pressure exerted at the pelvic brim. I was in the house but three quarters of an hour. I may say the patient has not had a pain since, and has made as rapid a recovery as in almost any case of ordinary labour I remember to have attended.

MALFORMATION OF THE FŒTUS.

BY

W. SEDGWICK, Esq.

Communicated by Dr. GRAILY HEWITT.

Read Oct. 5th, 1859.

A young married woman, healthy, and in labour with her first child, sent for me on September 26th, 1859; I saw her at 2 p.m., and found her suffering from only slight pains, which came on at intervals of eight or nine minutes. Soon after entering the room, a pain somewhat sharper than usual came on whilst she was walking about, by which the membranes were ruptured, and a very large amount of fluid was discharged. On making an examination, I found the os dilated to the size of a sixpence, and what was thought to be the elbow presenting. As the progress of the labour was slow, I left the patient for a short time and called to see her again at 5 p.m. The os was then dilated to the size of a shilling, and the presenting part was distinctly ascertained to be a sharp projecting elbow. I now succeeded in readily dilating the os, and in feeling the right hand of the child, which was lying towards the sacrum, the back of the child being turned towards the abdomen of the mother. On passing up my hand with the intention of turning the child, I found a difficulty in doing so, from what appeared to be an attachment of the placenta low down, giving rise to the supposition that it was a case of partial placenta prævia. The mass was just within the posterior border of the os, and presented many of the characters of the placenta, covered with membrane. This was subsequently found to be occasioned by a congenital deficiency or imperfection of integument over the abdomen of the fœtus, whose abdominal

viscera were covered only by a peritoneal or transparent membrane, which formed a large loose bag, in which the liver and intestines of the fœtus were lodged, almost outside, as it were, of its abdomen. The transparent membranous bag was probably at this time ruptured, for the part mistaken for the placenta was the fœtal liver; and the obscurity of the case was further increased by some loose folds of the small intestines being in the position which the umbilical cord might have occupied had the placenta really been in the situation assigned to it. No hæmorrhage had occurred; but, as the case was doubtful, I called in the assistance of my neighbour, Mr. Cholmondely, who succeeded in bringing down the left foot of the fœtus, and delivery was effected without much difficulty. The placenta, which was attached high up, was expelled soon after the child, who was stillborn, death having occurred in effecting the delivery. The child was a male, full grown, and presented a rare form of malformation; viz., congenital deficiency of the abdominal integuments and muscles; the only covering to the viscera of the abdomen being peritoneum and such rudimentary traces of skin as occur in spina bifida, where the investing membrane is transparent, as in this instance.

The mother, up to the present time, has recovered favorably, and is likely to do well.

The fœtus above described was exhibited to the Society.

CASE

OF

OVARIAN GESTATION.

BY

J. HALL DAVIS, M.D., &c.

Read Oct. 5th, 1859.

On May 14th, 1859, I was requested by Dr. Robinson, of Pentonville, to see with him a patient seriously ill. Her age was 25, she was of medium stature. Dr. Robinson informed me that she had been married five years, but had never till the present occasion been pregnant. She had never been well since her marriage. He was first called on March 10th, of the present year, when he made the following notes of the case, viz.:

"Severe pains, apparently spasmodic, in both hypochondria, with sickness at various periods of the day, suspected to be due to fæcal accumulation, as her bowels had been long costive. She was relieved of these symptoms by aperients and morphia; but in a few days they returned. She looks unhealthy, appetite bad, offensive taste in the mouth nearly always, dry lips; has had menorrhagia for three or four years, but for the last six weeks with but little cessation, accompanied by pains in the sacral, pubic, and inguinal regions. Leucorrhœa is present in the intervals.

"Examination per vaginam digitally, and by the speculum, discovers nothing abnormal, beyond the discharge already known to exist; it is muco-purulent and pinkish, and is seen to escape from the uterine orifice.

"March 20th.—The patient had a return of pain with

sickness on this day. The pains now extended over the whole abdomen with great tenderness to the touch. Just above the right pubes is an enlargement well defined at its right border, but extending into the left iliac region. The bladder began to be disturbed in its functions about this period, requiring the catheter from time to time."

Dr. Cockle, of Brook Street, Grosvenor Square, was consulted about this time; and I have been obligingly informed by that gentleman, that he discovered a hard enlargement in the left flank, acutely tender; so much so, and the patient's temper being so irritable besides, that he could not make a very satisfactory examination of this enlargement. He adds that she was then feverish, and his impression was that she was suffering from a subacute inflammation in this situation, and he was disposed to the opinion that the ovary was probably the seat of mischief. I mention this, as it has an important bearing on the question of the purulent fluid discharged subsequently, and confirms my independent opinion of the ovary being the seat of the disease.

State of the Case at my first visit, May 14th, and its subsequent progress.—The patient is extremely pallid, but there is also a swarthy tint of complexion; countenance exhibits anxiety and distress; frame much emaciated; skin hot and dry at present, but she has occasionally profuse perspiration; the lips parched. Her temper is, I am told, exceedingly irritable naturally, but much more so since her present illness.

The abdomen enlarged by a well-circumscribed body within, somewhat elastic and fluctuating to the taxis, reaching up to the umbilicus, where it is well defined, extending also into each iliac region, but more into the left, traceable also downwards into the pelvis. It presented to my mind very much the character of a single ovarian cyst; I could distinguish fluctuation in it pretty equally throughout. But I should here add, that the patient fancied she had felt movements of a child; further, that the breasts had enlarged, but had diminished again in size during the last few weeks,

though not to their former volume; the areola is tawny, interspersed with enlarged follicles; a yellowish creamy fluid was readily expressed from the nipples. This, Dr. Robinson informed me, had been the case for three or four weeks. On auscultation over the abdominal enlargement, defined as I have observed at the navel, I could not anywhere discover any fœtal pulsation. I found a soufflet, or blowing murmur, on the right side of the abdomen, which, however, I was aware might be due to the pressure of any enlargement, natural or morbid, upon the iliac vessels of that side; it presented to me, a near resemblance to the uterine or so-called placental soufflet of pregnancy.

Examination per vaginam.—I find the neck of the uterus high up, and inclined towards the symphisis pubis, but not into actual contact with it; the orifice, a little open, admits the point of the finger, and by it a clot of blood apparently is felt. The tissue of the cervix does not present that cushiony fulness and elasticity which may be found in the early months of pregnancy. The body of the uterus appears, so far as the finger can reach, to be slightly enlarged.

It being urgent that the patient should, if possible, be relieved of her very distressing symptoms, and that the diagnosis should be cleared up if practicable, I introduced an uterine sound through the uterine orifice, to measure the depth or the length of the uterine cavity, and found it to amount to three and a half inches. I hence concluded that the enlargement was extra-uterine.

I next examined a prominent swelling situated behind the cervix of the uterus: here the taxis, with gentle percussion of the enlargement over the abdomen externally, yielded distinct fluctuation; so it was evident that the abdominal enlargement, as felt externally, was continuous with that felt per vaginam, and I concluded again that an ovarian cyst, with fœtal contents, in all likelihood, was present.

I now resolved to make an opening into the vaginal swelling, to evacuate the contents of the suspected cyst; but, as a preparatory measure, the bowels having been, through

the patient declining all medicine, long costive, I ordered a clyster of a quart of warm, slightly stimulating injection. This, on account of the patient's restlessness and irritability of temper, was given with difficulty, and copious evacuations of fæcal accumulation, with many scybalæ, followed.

On the following day, I guided up a long trocar and canula to the centre of the prominence, and passed it inwards in the direction of the axis of the cyst; the trocar having entered, I withdrew it and advanced the canula, and found that it had entered a large cavity. An abundant flow of olive-coloured, highly putrescent and *purulent* fluid followed. I now removed the canula, as it became obstructed, and the flow from the cyst continued for several hours.

On the following day, I proposed to wash out the cyst and extend the opening, that I might explore the cavity of the tumour; but the patient, finding so much relief, passionately declined any further interference, but I was enabled, by a simple digital examination, to ascertain that the uterus had, after the escape of the fluid, returned to its normal position in the pelvis. The patient now recovered her appetite, but continued nevertheless to waste from day to day. By the wish of herself, her husband, and her medical attendant, I repeated my visits as often as wished; but, under the circumstances, I gave no hope of recovery; and, on July the 9th, our suffering patient breathed her last, uncontrollable diarrhœa having closed the scene.

Examination of the body.—The left ovary was found developed into a cyst, its lower boundary lying between the uterus and the rectum, and firmly adherent to both, as well as to the peritoneal cul-de-sac. The internal surface is a secreting surface; it bears an ash coloured, sloughing appearance, and gives out a putrescent odour. It contained no fluid, but there was found a decayed fœtus, the skeleton of which was falling to pieces; the remains of the placenta with its chorion and delicate umbilical cord were apparent, but of a dark colour from putrescency.

The cyst, besides being adherent to the posterior surface of the uterus and to the rectum, was firmly adherent also to the sigmoid flexure of the colon, and also to the cæcum: to the bladder also in part.

The right ovary was found of normal size and healthy.

I have omitted to state that the sigmoid flexure of the colon and the rectum were drawn by the tumour over towards the right side.

There was no disease of any other organ; so that there was reason to believe that, had the fœtus been extracted in time, the patient's life might possibly have been rescued.

POLYPUS OF THE UTERUS.

BY

J. HALL DAVIS, M.D., &c.

Read Oct. 5th, 1859.

The patient who was the subject of this case came under my care at the St. George's and St. James's Dispensary, on the 15th of September of the present year. E. B—, æt. 51, has had eleven children; the last, nine years ago; believes that she must have had the tumour at her first confinement, but fancied she had simply a bearing down of the womb. Seven years since, the tumour first appeared externally to the vulva, and about six years later she says it had reached its present size. She was in the habit of herself pushing it back into the vagina from time to time.

Floodings and profuse leucorrheal discharge commenced about nine years ago, but they had gradually increased. Three weeks ago the body of the tumour presented ulceration, apparently from friction against her thighs and clothes, and the discharge, sero-purulent, had from that time much increased.

She has suffered more or less from pains in the back, hips, and thighs, and her general health is much impaired. The tumour is as large as a moderate-sized orange, is of the fibrous variety, and exhibits, at its most depending part, an ulcerated surface of the size of a half-crown. Just at present there is but little hæmorrhage. Having regulated her bowels, I visited her at her own residence, on September the 9th; applied a strong ligature; and, with a bistouri, immediately after divided the pedicle. Thereupon, all hæmorrhage and discharge ceased; the patient was up

and about her household affairs at the end of a week, and since has called at the dispensary to return her thanks. The écraseur might have been employed here; but having a little more faith in the safety of the ligature conjoined with excision, than in the écraseur, I operated as stated.

ON THE

HYDATIDIFORM OR VESICULAR MOLE;

ITS NATURE AND MODE OF ORIGIN.

BY

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Read Oct. 5th, 1859.

SINCE the days of Ruysch, Albinus, and Morgagni, cases have been from time to time related, in which hydatid-like bodies have been discharged from the uterus. The resemblance between these bodies and hydatid cysts formed in other parts of the body, was sufficient to induce the older observers to consider the two identical. Later inquiries have proved to demonstration that these bodies discharged from the uterus are not true hydatids, but that they are the product of conception, and have indeed nothing in common with true hydatids, further than a slight external resemblance. Cruveilhier, by his minute description and accurate delineation of a specimen of the affection in an early stage, first conclusively demonstrated its non-hydatid character; and he expressed the belief that the hydatid-like cysts were the result of a transformation of the blood-vessels of the placenta,[1] thereby, as he himself confesses, confirming the conjectures or imperfectly defined opinions of some of the older observers.

Since the time of Cruveilhier's observations, much has been said and written on the interesting question, as to the nature and mode of origin of these hydatid-like bodies, and

[1] "Ces vesicules ou kystes sont le résultat de la transformation, non des vaisseaux lymphatiques, ainsi que le disent Bidloo et autres, mais bien des vaisseaux sanguins du placenta." ('Anat. Path.,' liv. i, pl. 1 and 2.)

yet the subject cannot be said to be exhausted. Cases presenting facts useful in the determination of the question are few and far between; the early stage of the affection generally escapes observation; and it is when the affection is in this stage alone, that inquiries can be made calculated to afford conclusive results.

In fact, it must be admitted that at present, very essential points in reference to the nature and mode of origin of the affection in question, remain still *sub judice*, or at least that they are still undecided in the mind of the profession at large. For a proof of the truth of this statement, it is sufficient to refer to the observations on the subject in the latest edition of Dr. Taylor's well-known work on 'Medical Jurisprudence.'

Considering the many important practical and medico-legal questions which require, for a solution, an accurate acquaintance with the whole history of the formation of the so-called hydatid mole, it will not, perhaps, be considered altogether superfluous or unnecessary that an attempt be made to reduce the series of facts relating to this subject, and already on record, into something like a system; and to give a more general view of the matter than has hitherto been presented. It will then be apparent, that several interesting questions respecting the circumstances attending the origin of this condition, have either not been touched upon at all, or in a manner altogether insufficient, unsatisfactory, and inconclusive.

Some time since, a very interesting and perfect specimen of the vesicular or hydatidiform mole having come into my possession, I was led to study the subject more particularly than would otherwise have been the case, and an attentive consideration of this specimen, and of several others which I have had opportunities for inspecting, has led me to form certain conclusions respecting the origin and history of this curious pathological product at variance with those of previous writers on the subject. These conclusions, together with the facts by which they appear to be substantiated, I now purpose to lay before the Society.

The specimen just alluded to, and which, together with certain drawings, is now exhibited, was obtained under the following circumstances :

A lady, æt. 24, and who had been delivered by myself of her first child seven months previously, requested my services early on the morning of September 10th, 1858. She had been suckling her child, which was healthy and well nourished, up to the date just mentioned, and had noticed that, for the last six weeks, the quantity of milk secreted was increased. No menstrual discharge or anything resembling it had been seen by her, until six days before I was sent for. She had not experienced morning sickness, but constipation and a certain fulness of the lower part of the abdomen had been present for some weeks. She had not the slightest idea that she was pregnant; but one of her female friends had told her that if she was not then pregnant she soon would be—judging, it would appear, from some change in her countenance and manner. Six days before I was sent for, a slight sanguineous discharge commenced, considered to be returning menstruation. This discharge continued for about four days and then ceased; it was unaccompanied by pain. On the morning of my visit, having just suckled her child, she experienced a sudden recurrence of the vaginal hæmorrhage, and pains resembling those of labour were felt at intervals of a quarter of an hour. The discharge of blood was not considerable. Two hours after, I first saw her and made an examination. After removing what appeared to be a small coagulum of blood, the size of a nut, from the vagina, a soft mass was felt hanging out of the os uteri. This mass was easily extracted, and consisted of an entire ovum, the decidua uterina being unbroken, except at its lower part. The hæmorrhage which followed was very trifling, and the patient recovered without inconvenience. Twelve months subsequently she was delivered of a second child.

Judging from the external appearance of the ovum (Plate IV, fig. 1), it seemed to be two months old, perhaps a little more. The membranes of the ovum were almost

entire, the mass having been expelled complete; and, a slight laceration only excepted, just as it had lain in the uterus.

When laid flat, the mass expelled measured, vertically, two inches and three quarters; transversely, two inches; it was half an inch thick. It was of a triangular shape, and presented three openings, the two superior of which corresponded with the commencement of the Fallopian tubes, and were one eighth of an inch in diameter: the lower opening corresponded with the cervical canal of the uterus, was irregular in shape, and from it a laceration of the external covering of the ovum, evidently produced during expulsion, extended upwards for one inch. The external covering of the ovum, viz., the decidua uterina, thus extended over the whole of its surface, the lower part excepted, and formed a sac, shut everywhere but at the three openings indicated. This external envelope presented the usual well-known characters of the decidua uterina. Inferiorly, blood had been effused into its substance and the membrane was in this position much thickened. Over a space of an oval shape, and occupying part of the upper and the chief part of the anterior (or posterior) surface of the ovum, the external surface was elevated above the general level, and a distinct groove bounded this—the decidua serotina. Here the decidua was firmer, more dense, but irregular as regarded thickness, and tolerably large blood-vessels of a serpentine form dipped into it at intervals; these were filled with blood. A little tension of this part of the ovum easily produced crevices in the decidua serotina, through which became visible little cyst-like bodies, to be more particularly described hereafter. In places these extended quite to the surface.

The *decidual cavity* was open below and above by the three openings previously described. From above and behind (or from before), and covered by the decidua reflexa, projected into it the ovum, an oval-shaped bag with fluid contents. The latter projected downwards in a nipple-shaped form a little beyond, and to the outside of, the decidua uterina. The

internal surface of the decidua uterina presented the characteristic velvety appearance; the decidua reflexa opposed to it was denser and firmer than it. The nipple-shaped projection, covered by the decidua reflexa, was hard, dense, and thickened; and on cutting into, it showed a fibrous texture, an appearance probably due to altered blood.

On cutting through the decidua reflexa it was found pretty firmly adherent to the chorion membrane, a few small and delicate processes appearing between; the chorion and the amnion were adherent; and, arriving at the interior of the amnionic sac, which was one inch and a half long, and of an oval shape, it was found to contain a serous fluid only. No trace of the embryo or of the umbilical cord could be discovered, although the walls of the cavity were to all appearance quite intact. A section, carried quite through the upper part of the ovum, and involving therefore the decidua serotina, as well as the decidua reflexa, showed that the villi of the chorion, over more than half its surface, and corresponding in extent with that of the serotinal decidua in contact with it, had undergone the hydatidiform degeneration (see Plate IV, fig. 1, *e*). The space between the surface of the chorion membrane and the external surface of the decidua serotina was generally one third of an inch. This space was occupied by transformed chorion villi extending from the chorion nearly, and in places quite, to the surface of the decidua serotina.

The general arrangement of these villi was as follows: delicate, transparent, apparently tubular processes, passed from the chorion to the decidua, in their passage becoming dilated more or less abruptly, into rounded, oval, transparent, cyst-like bodies. The processes or villi divided irregularly in their passage towards the serotinal decidua, each division presenting the cyst-like enlargements; and the final termination of each branch at the decidua was marked by a rather larger cyst-like body than usual, (as shown in the magnified representation (Plate IV, fig. 2, *b*). The decidua formed little recesses, into which these globular terminations of the chorion villi were embedded. The villi thus presented the

appearance of tubes irregularly and abruptly enlarged at intervals, or that of a mass of small bladders closely packed together. From the enlargements, and from the trunk of the villus, between the enlargements, little bud-like processes were seen, by the aid of the microscope, to extend outwards on every side; and, for the most part, these bud-like processes were enlarged in a pyriform manner at their free termination. While most of the cyst-like bodies presented a hyaline or transparent aspect, there were others quite opaque and dense.

Examined by the microscope (see Plate V) the surface of the hydatidiform enlargements were seen to be covered by cells, which were widest apart where the dilatation was greatest. The intervening stalks or pedicles also presented cells of the same character, but much more closely set together and smaller. The little bud-like processes (Plate V, *b, b, b*) were similarly but more closely still beset with cells. The membrane on which these cells were visible was transparent, and presented minute specks, apparently oil-globules. The cells over the enlarged portion of the villi were for the most part transparent. When cut across, the cyst-like enlargements subsided and a fluid escaped, but this fluid could not be forced into the pedicles by pressure. The cyst-like bodies shown in Plate V, measured from one sixteenth or even less to one sixth of an inch in diameter. Their interior was delicately fibrous. The more opaque rounded bodies before alluded to appeared to be vesicles which had undergone a more advanced form of degeneration.

The actual description now given varies in no essential points from the descriptions of the early stage of the disease which are to be found in the works of Cruveilhier, Mettenheimer, Gierse, Wedl and others. It was necessary, however, to give the details respecting this specimen fully, in order that what remains to be said may be duly appreciated.

An attentive examination of the specimen in question and of the drawings made therefrom, will be quite sufficient to

show that the difference between the enlargements, the cyst-like bodies described—and the so-called hydatids which are expelled from the uterus, at a later period of pregnancy, is merely one of degree. We may completely and entirely dismiss the whole theory of the hydatid character of these bodies, although it will be necessary to say a word or two respecting the possibility of the occurrence of true hydatids in the uterus in another part of this paper. It is quite evident that these cyst-like enlargements originate in the villi of the chorion, and in this view all good recent authorities concur. The question to be resolved is—*What is the nature and cause of the change in the chorion villi which results in the production of these hydatidiform bodies?*—and on these points we find a diversity of opinion.

The cyst-like appearance of the bodies in question, has induced some very good observers to consider the change as one consisting essentially in the formation of cysts—cysts originating in certain transformations of the chorion villi or parts thereof. Mettenheimer,[1] who has given a very accurate description and delineation of the affection, enters into a long discussion with the view of showing that this is the case, and his opinions are quoted and endorsed by Mr. Paget. Mr. Paget says, "The whole process may therefore be probably thus described: certain of the cells in the proper villi of the chorion, deviating from their cell-form, and increasing disproportionately in size, form cysts, which remain connected by the gradually elongated and hypertrophied tissue of the villi;" and then, quoting Mettenheimer, "'on the outer surface of the new-formed cysts, each of which would as it were repeat the chorion and surpass its powers, a new vegetation of villi sprouts out, of the same structure as the proper villi of the chorion. In these begins again a similar development of cysts, and so on, *ad infinitum*.'" "No instance," says Mr. Paget, "could afford a better confirmation of the production of cysts by the enormous growth of elementary cells, or a better type

[1] "Mikroskopische Untersuchung einer Hydatidenmole." Von Dr. C. Mettenheimer, Müller's 'Archiv,' 1850, p. 417.

of the capacity of cysts thus formed to produce structures resembling those in the abnormities of which themselves originated."[1]

Another opinion, advanced by Gierse[2] is, that the change consists in hypertrophy of the natural structures found in the chorion villi, with secondary œdema. Gierse's description of the appearances observed is accurate; and, as will be presently seen, his interpretation of those appearances is more in accordance with my own than Mettenheimer's.

The cyst theory of Mettenheimer and Paget I am induced to dissent from altogether, after a careful consideration of the subject. That view is disproved by the actual appearance of the specimen now exhibited, and by considerations derived from a knowledge of the normal anatomy of the chorion villi. The healthy chorion villi, examined at an early period, consist of processes branching out and dividing like the branches of a tree. These processes are furnished, as long since pointed out by Velpeau, with clavate terminal enlargements; they consist of a homogeneous, transparent membrane, on the surface of which are seen nucleated cells in close apposition one with the other. The processes do not appear to be hollow; when cut into, they present a network of cellular tissue. The appearances of the normal villi, as thus described, are well seen in the drawings of another specimen of abortion which are now exhibited (See Plate VI). If the two drawings be compared—that in which the villi are healthy, and the one in which the villi are transformed into hydatidiform masses—it will be at once apparent that we have before us precisely the same structures in the two cases. The enlargements appear to be due to some transformation, altogether irrespective of the nucleated epithelium-cells which cover the surface. In the altered villi, we see the cells over the enlarged portions separated from one another, the natural result of a distension of the portion of the villus beneath; and the enlargement is due

[1] 'Lectures on Surgical Pathology,' vol. i, p. 64.

[2] "Ueber die Krankheiten des Eies und der Placenta." Von Dr. Gierse. 'Verhandl. der Gesellschaft für Geburtshülfe,' in Berlin, 1847, p. 126.

evidently, not to cyst-formation originating in the superficial cells, but to distension of the interior of the villus beneath the cells by a serous fluid. This, indeed, is Gierse's view of this part of the question. Respecting the cells themselves it does appear that they are changed, but this change consists simply in a very slight distension of their interior by serous fluid.

Another phase of the transformation is depicted in Wedl's 'Pathological Histology,' where the surfaces of the villi are beset with fatty molecules, this is apparently an advanced condition of the same degenerative process witnessed in the specimen before described.

With respect to the identity of the hydatidiform enlargements with the chorionic processes, the evidence appears to be perfectly conclusive, the facts stated also are strongly against the cell theory maintained by Mettenheimer. The conclusion which must be formed is then that in the hydatidiform mole we have not a new formation, but simply an alteration and degeneration of previously existing structures.

We have next to inquire, *What are the circumstances which determine the pathological alteration now under discussion?* The conclusions drawn by all writers who have advanced an opinion on the subject, appear to me to be erroneous. It has been universally supposed that the transformation is the starting point of the affection, that it is the disease of the chorion which is the cause,—the death of the embryo, the effect. Thus, Dr. Barnes, the latest English writer on the subject, considers that the disease consists in a perverted development or involution of the proper structures of the organ; and after describing the budding out which normally occurs in the chorion villi, states that, "under the influence of a perverted developmental force these buds, instead of growing into villi may dilate into true vesicles or hydatidiform cysts."[1] Gierse's theory is that, in consequence of some circumstance hindering the formation of the placenta, the remaining chorion

[1] 'Brit. and For. Med.-Chir. Rev.,' Jan., 1855, pp. 168, 169.

villi become hypertrophied and œdematous. The view of the question which I have been led to take, and which is opposed to those just alluded to, is, that the changes in the chorion villi which result in the production of the hydatidiform mole, are secondary to, and a consequence, not a cause, of the death of the embryo. On this view of the case, the vesicular transformation observed is nothing more than a degeneration of structures arrested in their development, this arrest of development taking place simultaneously with the death of the embryo.

If we examine the state of the villi during the second month of fœtal life, we find that at that time their vital activity is very great, they are engaged in supplying nourishment and means of growth to the embryo. During the same period also, a portion of these villi become transformed and developed into the fœtal placenta, while the remainder disappear. The vitality of the fœtus seems to be the circumstance which determines the further development of the placental villi; and the development of the fœtus and of the placental chorion villi proceed *pari passu*. There are no facts showing that the embryo being dead, the chorion villi can become subsequently developed into blood-vessels, as is the case when the life of the embryo persists.

But the death of the embryo does not necessarily determine the cessation of *vitality* in the chorion villi; in order that this may be the case, it is necessary that a separation be effected between the uterus and the decidua. As long as the decidua remains connected with the uterus, the chorion villi will continue to enjoy a certain degree of vitality, but the embryo having ceased to live this vitality is bereft of developmental power, and the chorion villi though they may actually grow and increase in size, retain the essential structure which they possessed, when the death of the embryo took place. Accordingly, if the death of the embryo occur very early, and before the appropriation of certain of the villi to form the fœtal placenta has commenced, the ovum may continue to grow, and may remain in the cavity of the uterus; and in such a case the whole of the chorionic mem-

brane would give rise to hydatidiform villi. If, on the other hand, the death of the embryo be postponed until the formation of the fœtal placenta has commenced, the hydatidiform degeneration will be necessarily limited to the part of the chorion which is in contact with the decidua serotina. In the specimen exhibited and described the affection is thus limited.

In the specimen exhibited, the size of the hydatidiform cysts is very inconsiderable. In the more generally known specimens these vesicular bodies have attained a much larger size. Thus some are described as of the size of a currant, some as large as grapes or even gooseberries, and it does not appear that the limitation as to the size is anything more than accidental. They continue to grow, as long as the uterus is tolerant of their presence, by virtue of absorption from that part of the decidua which remains still connected organically with the uterus. This portion of the decidua continuing to be supplied with blood, will continue to supply nourishment to the chorion processes, and so contribute to the increase of the size of the hydatidiform cysts.

After the chorion villi have attained a certain degree of development, they are no longer capable of undergoing the hydatidiform degeneration. Regular blood-vessels having taken the place of these processes, the conditions necessary for the production of these peculiar vesicular enlargements no longer exist. The period within which the hydatidiform degeneration may occur, does not probably extend beyond the middle or end of the third month at farthest; and if the fœtus perishes subsequently to this time, the hydatidiform degeneration will not be met with.

When the degenerated chorion villi remain for some months in the uterus, the whole is seldom expelled *en masse;* and the apparent absence in some cases of the membrane from which the chorion villi depend has created in the minds of some observers doubts as to the non-hydatidiform nature of the cyst-like bodies. It must be remembered that this membrane is of very limited extent, and may be easily torn or rendered less evident in the process of extraction;

in the specimens, however, which I have examined, traces of it were always present.

The *history of the embryo,* in connection with the origin of hydatidiform chorion villi has been only incidentally referred to. In the larger number of cases, careful examination of the diseased mass expelled from the uterus discovers no trace whatever of a fœtus, but in some few cases a fœtus is discovered. When, in cases of hydatidiform degeneration of the chorion villi a fœtus is found, it is always very small; the largest of which I have found an account is represented in Dr. Granville's 'Graphic Illustrations of Abortion,' and this one measured about an inch and three quarters in length. In the majority of cases its size is much less considerable. The evidence obtainable on this point then goes to show, that in cases of hydatidiform degeneration of the chorion, the embryo perishes at a very early period, so early as to leave no tangible traces of its existence behind, or that it does not survive a period which may be fixed at or near the end of the third month. In my own case above related, no embryo was discovered. The fact that the fœtus when found to be present in cases of hydatidiform degeneration is always small, furnishes in my opinion an argument in favour of the theory which I have advocated, viz., that the chorion villi become altered subsequently to the death of the fœtus. If the fœtus perishes *subsequently* to the time during which alone, according to the theory in question, the villi can be changed into vesicular-looking bodies, it accords with experience that no hydatidiform appearances will be observed.

A case has very recently been recorded by Mr. Michael, 'Beale's Archives,' iv, 320, in which the "so-called hydatids of the placenta were developed on the membranes at some distance from that organ.

"The placenta and membranes," says Mr. Michael, "were normal, with the exception that at about three and a half inches from the placenta, there existed a patch of hydatid-like bodies about the size of the palm of the hand. The vesicles had the usual characters of the so-called hyda-

tids, and varied in size from a hemp seed to a nut. The development of these bodies is probably to be accounted for on the supposition, that a few of the villous processes which, at an early period of development, completely cover every part of the chorion, had remained in this situation, and had been developed into the bodies above described."

The case of Mr. Michael shows that one or two of the chorion villi alone may exhibit the hydatidiform change, the placenta being well formed. The circumstance, however, in no way affects the explanation offered by myself. I interpret Mr. Michael's case as follows:—the patch of "hydatid-like bodies" were chorion villi, which from some cause or other did not become involved, as did the other chorion villi, in the formation of the placenta, and retaining to a certain extent their connection with the decidua, were to all intents and purposes in the same position, as regards their development, as if the embryo had perished. It must also be recollected that even after the middle of pregnancy, the dwarfed chorion villi may be detected, if properly looked for, on the surface of the ovum away from the placenta. One or two of these might readily "grow" a little, by absorption from the uterus.

Whether, then, we consider the minute anatomy of specimens of the hydatidiform degeneration, the condition of the embryo when associated with it, or the circumstances under which the change occurs, we find that all known facts are perfectly in harmony with the conclusions now submitted in reference to this subject.

It is difficult to say what is the cause of the death of the embryo, in these cases of hydatidiform degeneration of the chorion; but it may not be uninteresting to inquire briefly into the nature of the circumstances which may be supposed to attend on, or conduce to this result.

Supposing the ovum to be healthy, and abortion to occur, the cause of the abortion is generally contraction of the uterus on its contents, and this may of course be produced in a variety of ways. The death of the fœtus in cases of

hydatidiform degeneration is caused, as I have been led to believe, by contraction of the uterus of a less violent, but of a more sustained character, during the early weeks of pregnancy; the degree of contraction being insufficient to produce such a complete separation of the ovum from the uterus as to lead to its immediate expulsion, but quite strong enough to reduce materially the supply of blood sent to the maternal membranes, through which the fœtus is nourished. The first result which would occur under such circumstances, would be the death of the fœtus; and the second, supposing the ovum still to maintain its connection with the uterus,—the degeneration of the chorion villi above described. This explanation has suggested itself in consequence of a consideration of the facts of the case related above. It will be recollected that the patient, who was delivered of the specimen now exhibited, was suckling at the time the abortion occurred, not being aware of her pregnant condition. From the first, then, the well-known influence of mammary irritation in producing contraction of the uterus, was in operation; and it may be conjectured, with much plausibility, that the repeated contractions which doubtless took place during suckling, produced the result described, and in the manner which has been suggested. The influence of lactation in producing abortion has been adverted to by more than one observer. Dr. Barnes, in an able paper published in the 'Lancet' for 1852, brought together some facts which bear on this interesting question. Dr. Barnes found that, in a number of cases of abortion, into the particulars of which he had inquired, abortion occurred in 17 per cent. of cases of conception during lactation, and in only 10 per cent. of cases in which conception occurred independently of lactation, thus showing that abortion is peculiarly liable to occur in women who are suckling. Respecting those cases, then, in which abortion is due to the influence of lactation, it appears to me highly probable that the abortion is brought about in consequence of the interference with the nutrition of the embryo caused by contraction of the uterus. If, the embryo having ceased

to exist, the ovum is not thrown off, the hydatidiform degeneration is the natural result.

Lactation is only one of a number of possible causes of the death of the embryo. The development of the embryo may be arrested from a variety of causes which cannot be enlarged upon in this place.

The *symptomatology* of cases of so-called hydatid pregnancy, so far as the mother is concerned, has received much attention at the hands of several writers, Dr. Montgomery in particular, and I have nothing new to offer on this subject. In a large number of cases the uterus retains its contents until the fifth or sixth month, and watery, alternating with slightly-sanguineous discharges, are previously observed. The deficient or irregular mammary sympathies, and the rapid increase in the size of the uterus, are the more prominent of the symptoms present in such cases. The hydatidiform mass may be retained in the uterus, and continue to grow for eight, nine, or ten, months, and in very extreme cases even longer.

An important practical question has been more than once raised. *Can a portion of retained placenta take on the hydatidiform change?* If the view I have taken of the history of the formation of the hydatidiform mole be correct, this question is to be answered as follows:—The placenta belonging to a mature fœtus cannot, if healthy at the period of the birth of the child, become the seat of the hydatidiform change, the chorion villi having long since disappeared and become converted into blood-vessels. The only circumstances under which hydatidiform bodies might be subsequently expelled from the uterus, and give rise to the supposition that they arose from degeneration of a retained placenta, are, as I believe, the following:—Firstly, in cases of double conception, when one embryo having perished at an early period, the membranes thereto belonging have undergone the hydatidiform degeneration and are not expelled from the uterus together with the normal placenta. In illustration of this position a case may be referred to which was published in the 'Lancet,' for 1846, vol. i, p. 430, in which

a hydatidiform mass (in bulk about three pints) was expelled *together with* a normal placenta. In this case it is most probable that there was a double conception, and if the remains of the diseased ovum had not been expelled *with* the normal placenta, but some weeks or months subsequently, the case would have come under the above category. A *second* possible case is that a portion of the chorion villi may become separated organically from the fœtus at an early period and undergo the hydatidiform degeneration, whilst the remainder grow and nourish the fœtus up to the full time, as in the case related by Mr. Michael before alluded to. If the diseased portion were retained in the uterus, the supposition before alluded to might arise.

One other question only remains to be discussed: Can true hydatids be expelled from the uterus? and if so, how are they to be distinguished from the vesicular bodies which owe their origin to the degeneration of the chorion villi?

There can be no question but that the cases related of expulsion of the true hydatids from the uterus are, with the exception of one or two cases (and these are not altogether free from doubt), in reality cases of hydatidiform degeneration simply. Still, it would appear that the possibility of an expulsion of true hydatids from the uterine cavity must be admitted. When so expelled they, doubtless, originate in the substance of the uterus, and subsequently burst into the cavity of that organ.

A case which I had an opportunity of observing in St. Mary's Hospital, about a year ago, presented some data which may be usefully and appropriately mentioned in connection with this question. A young unmarried woman died with excessive enlargement of the abdomen, and on examination it proved that the peritoneal cavity was beset with true hydatid cysts which had originated primarily in the liver. These hydatid cysts were found attached to the uterus anteriorly as well as posteriorly, to the ovaries, to the walls of the pelvis, in fact, few portions of the peritoneal

surface were without them. Had life been prolonged the bursting of some of these cysts into the uterus, or into the vagina, was almost inevitable; and then the phenomenon would have been presented of a young unmarried woman discharging true hydatids from the generative passages.

With reference to the other part of the question, How are the true hydatids to be distinguished from the degenerated and enlarged chorion vesicles? it must be answered, that a careful examination of the bodies expelled, by the naked eye and by the aid of the microscope, should be sufficient in every case to set the matter completely at rest. In the case of true hydatids, we find cysts enclosed one within the other, in the case of hydatidiform vesicles we find round or oval bladder-like bodies attached one to the other, somewhat after the manner of a string of beads, with slender peduncles or intervening connecting portions. Moreover, the well-known hooklets of the hydatids are usually found when the cysts are really of hydatid origin.

DESCRIPTION OF PLATES IV, V, AND VI, ILLUSTRATING THE ABOVE PAPER.

PLATE IV.

Fig. 1. Hydatidiform ovum, natural size.

a, *a*. Decidua uterina.

b. Decidua serotina.

c. Decidua reflexa.

d. Amnionic cavity.

e. Hydatidiform chorion villi.

Fig. 2. Sectional view (from the above specimen) of chorion membrane, hydatidiform chorion villi, and decidua serotina. (Magnified seven diameters.)

a. Chorion membrane.

b. Hydatidiform chorion villi.

c. Decidua serotina.

PLATE V.

Portion of hydatidiform chorion villus. (Magnified 350 diameters.)

a. Dilated portion of villus.

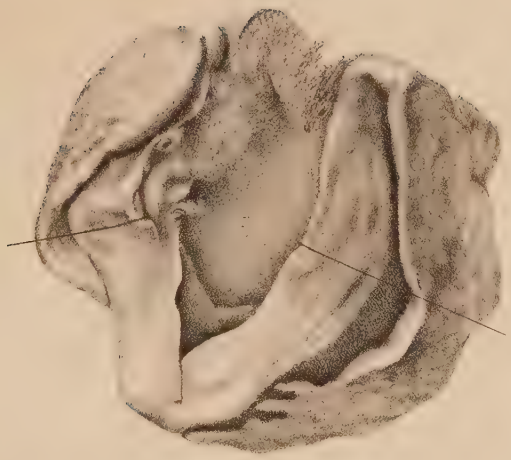
b, *b*, *b*. Bud-like pedunculated processes of villi.

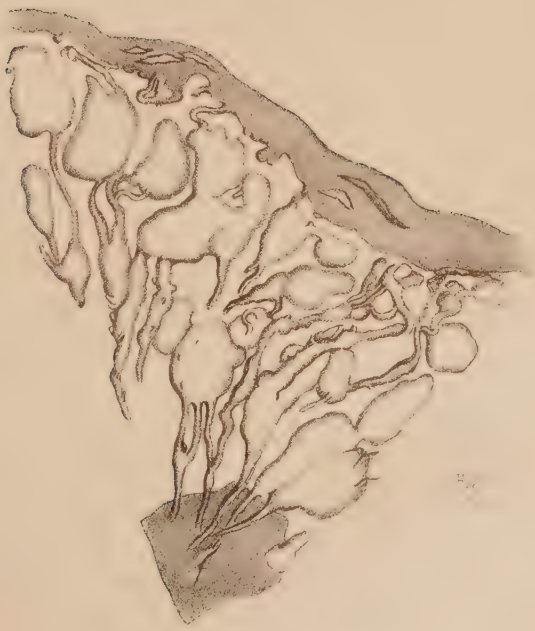
PLATE VI.

Drawings from an ovum of about five weeks; chorion structures apparently normal. Introduced for the purpose of comparison.

Fig. 1. One of the chorion villi, magnified seven diameters.

Fig. 2. A portion of fig. 1, more highly magnified, showing the cells on the surface of the villus.





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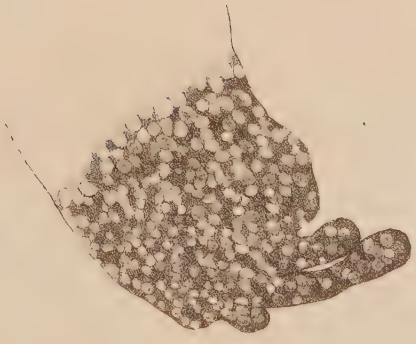


NOTES OF A CASE

OF

CRANIOTOMY,

IN WHICH DELIVERY WAS READILY EFFECTED BY TURNING AFTER PERFORATION, WHEN INSTRUMENTAL EXTRACTION WAS FOUND IMPOSSIBLE,

WITH OBSERVATIONS UPON THE SUBSTITUTION OF THIS MODE OF DELIVERY IN CERTAIN CASES.

BY

F. W. MACKENZIE, M.D., M.R.C.P.,

SENIOR PHYSICIAN TO THE WESTERN GENERAL DISPENSARY; PHYSICIAN-ACCOUCHEUR TO THE PADDINGTON MATERNITY; AND CONSULTING PHYSICIAN-ACCOUCHEUR TO THE WESTBOURNE DISPENSARY AND MATERNITY.

Read Nov. 2nd, 1859.

The notes of the following case are submitted to the Society, as bearing upon an important practical question which I propose to raise, viz.: the propriety of substituting turning for instrumental extraction of the child after perforation of the fœtal head, in certain cases of deformity of the pelvic brim necessitating craniotomy. The dangers and mortality of this operation have been dwelt upon by many writers, and it is believed that any proposal calculated to lessen them will not be altogether unacceptable. I will therefore first give the particulars of a case of contraction of the brim, in which delivery was easily effected by turning after perforation of the fœtal head, in which all attempts at extraction by the crotchet and craniotomy forceps had failed, and afterwards offer a few observations upon the propriety of substituting this mode of delivery in certain cases in which the fœtal head is precluded by deformity from entering the pelvic cavity.

Case.—On the evening of the 3d of April, 1859, I was summoned to a patient in the Paddington Infirmary, who was reported to have been taken in labour in the course of the afternoon. I found, however, that the labour pains had been slight, and had entirely passed away prior to the time of my arrival. Under these circumstances, and not anticipating anything unusual, as the patient was young and healthy, had attained her full period of pregnancy, and was apparently well formed, I made only a cursory examination, and not finding the presentation within reach, placed a midwife in charge of the case, with directions to send for me when labour supervened. The patient slept quietly during the ensuing night, and during the next and two following days was in every respect comfortable and well. On the morning of the 7th, labour pains again set in, and continued with more or less frequency until noon, when I was sent for. I now made a more careful examination, and found the presentation, which was the head, above the brim of the pelvis, but impeded in its progress downwards by a considerable projection of the promontory of the sacrum, which narrowed the conjugate diameter to little more than two inches. Under these circumstances it appeared to me that the descent of the fœtal head into the pelvis would be impossible, and that craniotomy offered the only chance of delivery. As, however, the os uteri was as yet but slightly dilated, and it was important to husband the patient's strength, a continuous electro-galvanic current of moderate intensity was applied from the upper part of the spinal column to the os uteri; both with a view of accelerating the dilatation of the os uteri, and also of bringing the fœtal head well within reach. Having premised this proceeding, I again visited the patient in the evening, accompanied by my colleagues, Mr. Moullin and Mr. Abud. The os uteri was now well dilated, the fœtal head rested upon the sacrum, and the patient was cheerful and well. They both recognised the extreme contraction of the pelvic brim, and the former considered it to be so considerable as to justify no hope of delivering the patient except by the Cæsarean

section. With their concurrence, however, I proceeded to attempt the delivery by craniotomy, and without any difficulty was enabled to perforate the head, but all subsequent attempts at extraction by means of the crotchet and craniotomy forceps were unavailing. Successive attempts were made by each of my friends, as well as by myself, with only negative results; and after upwards of two hours had been thus spent in fruitless efforts, the attempt was abandoned as impracticable. In this conjuncture it was suggested whether, inasmuch as the fœtal head had not yet entered the pelvis, it might not be possible to push it aside, and effect the delivery by turning. I accordingly made the attempt, and to my extreme surprise, as well as that of my friends, succeeded in readily introducing my hand, turning the child, and effecting its delivery without any difficulty whatever. The patient up to this period appeared to have borne up well, and I was now sanguine that she would have made a favorable recovery; but in about half an hour after her delivery, without the occurrence of any hæmorrhage, she began to show symptoms of faintness and exhaustion. Cordials and stimulants were given, as well as opium largely, without that response which we had expected; and in spite of all that we could do she became more and more faint, and died within a few hours of her delivery, apparently from the fatigue and shock of the operation she had undergone. A post-mortem examination of the body was made two days afterwards by the house-surgeon of the Western General Dispensary and myself, but no sufficient cause of death could be discovered. The uterus was well contracted; there had been no internal hæmorrhage, nor had any particular injury been sustained by the uterine organs. A careful measurement was however made of the diameters of the brim with a pair of compasses and a rule; and it was found that the conjugate diameter measured exactly two inches and three eighths, the transverse five inches and a quarter, and the oblique four inches and three quarters.

Here, then, are the facts, from which it is clear that in certain cases of contraction of the brim necessitating craniotomy, the delivery may be easily effected after perforation by turning, when long-continued attempts at extraction by the crotchet and craniotomy forceps had altogether failed; and if such a result was attainable in the present case, might it not be so in others? and does it not justify a further trial of the practice?

These questions, I believe, will be best elucidated by considering, on the one hand, the several sources of danger in craniotomy operations as ordinarily performed; and, on the other, how far they may reasonably be expected to be diminished by substituting turning for instrumental extraction, when the operation is deemed necessary from contraction of the pelvic brim.

There are then clearly four main sources of danger in craniotomy cases:—first, that arising from the length of time the patient may have been in labour before delivery is attempted; second, that arising from injuries inflicted upon the uterine organs by the instruments employed; thirdly, shock—contingent probably upon exhaustion consequent upon long-continued uterine action and operative interference combined; and fourthly, that depending upon the consecutive febrile and inflammatory reactions which are so apt to arise as a consequence of protracted suffering and exhaustion on the one hand, and contusion, laceration, or other mechanical injury instrumentally inflicted on the other. Regarding, however, the two latter sources of danger as contingent mainly upon the two former, we may assume practically that there are two great sources of danger in craniotomy cases; viz., first, prolonged uterine action tending to exhaustion and subsequent shock; and secondly, mechanical injury tending to inflammatory and febrile reactions. In the management, therefore, of these cases, we have to consider how far these sources of danger may be respectively obviated or diminished.

With regard, then, to the first—that arising from prolonged uterine action prior to delivery—it would seem

evident, from the statistics of Dr. Collins, quoted by Dr. Simpson, that this is an important source of danger in these cases. Thus, of 125 instrumental deliveries only 1 in every 17 of the mothers was lost when the delivery was accomplished within twenty-four hours from the commencement of labour; 1 in every 7 of the mothers died when the delivery was delayed till from twenty-four to forty-eight hours; and nearly 1 in every 2 mothers perished when the delivery was delayed till the labour had gone on above forty-eight hours. It is however, practically, only necessary to be aware of this source of danger to anticipate and avert it, and, by a due appreciation of the relative dimensions of the brim and fœtal head, to resort early to operative interference whenever imperatively required. With the view, further, of fulfilling this indication, I have reason to believe that the electro-galvanic current, as employed in the present case, may be usefully applied at an early stage of the labour. It undoubtedly exercises a mildly-stimulating and tonic influence upon the uterus. It is invigorating to the patient, and, by accelerating the dilatation of the os uteri, brings the case earlier within the reach of operative assistance.

But the second source of danger in these cases has a more immediate relation to the purpose of the present communication, viz., that arising from injuries instrumentally inflicted. And here it is impossible not to feel that the instrument ordinarily employed for extraction in these cases, viz., the crotchet, is both hazardous and dangerous in its practical application. In the words of Dr. Gooch, it is a diabolical instrument; and even in the hands of the best practitioner is a dangerous one. "I have never," he observes, "met with an accident from the use of it myself; not, however, because it did not sometimes slip, but because I chose rather to lacerate my hand than my patient's vagina." These remarks, however, refer to the employment of the instrument when the fœtal head has entered the pelvic cavity; and if in these cases it is so hazardous, how much more so must it be when the fœtal head is above the brim

of the pelvis, and is mechanically impeded in its descent. Let it be further observed, that in the former case we have in the craniotomy forceps a safe and efficacious substitute; whereas in the latter, when the distortion is very great, the employment of this instrument is attended with much difficulty and uncertainty.

But there is yet another and, as it seems to me, very serious objection to the use of the crotchet in these cases; viz., its mechanical unfitness for guiding the descent of the head so that its different diameters may be made to accord with those of the brim. When, for instance, we are told to get the most secure hold of the fœtal head that we can, and to draw down in the direction of the axis of the pelvic inlet, it is impossible to know how the cranial diameters are placed relatively to those of the brim, and it is still further impossible to adjust them by means of this instrument. Hence, in the cases I am considering, it will often happen that traction will be made when the long and short diameters of the fœtal head and brim are relatively opposed to each other, and when, consequently, no amount of mechanical power can effect the delivery, apart from the danger of employing such an amount of unguarded force.

I conclude, then, that the ordinary means at our command for the management of these cases are both inefficient and hazardous, and that any safer plan that can be proposed is deserving of consideration and trial. Now, I need scarcely observe, that the substitution of the delivery of the child by the hand for instruments is, in this respect, far preferable, and I can only suppose that it has not been generally resorted to from a feeling that it was impossible to effect the delivery in these cases by this means. The present case is however important, as being decisive on this point, and as showing that when the conjugate diameter does not exceed two inches and three eighths (an extreme amount of distortion) delivery may be easily effected by turning, when it has been found to be impossible by instruments. Nay, further, if I might judge from the facility with which the operation was performed in this case,

I should be disposed to lay it down as a rule that after perforation it might be performed in any other in which the conjugate diameter does not exceed two inches.

If this view should be hereafter supported by the experience of others there can be no doubt that a much greater success will attend the operation of craniotomy than as at present performed. I am most anxious, however, not to be supposed to generalize too largely from the facts of a single case, or to submit the conclusions I have arrived at otherwise than suggestively for the guidance of others; nor must I be supposed as arguing in favour of turning in all cases requiring craniotomy. When, for instance, the fœtal head is within the pelvis such a proceeding would be unwarrantable, and otherwise, when above the brim, instruments may be guardedly tried in the first place. All I would observe is, and with this observation will conclude, that inasmuch as it has been clearly shewn from the history of this case that delivery may be comparatively easily effected by turning, after perforation, when instrumental extraction has been found to be impossible, that, therefore, the same practice may be resorted to in similar cases, with every prospect of success, when it is found that instrumental delivery is either hazardous or impossible.

THE TREATMENT

OF

VESICO-VAGINAL FISTULA,

BY A

NEW METHOD.

BY

ROBERT BATTEY, M.D., OF GEORGIA, U.S.

Read Nov. 2nd, 1859.

THE difficulties encountered in the treatment of large fistulous openings into the bladder by the methods heretofore in use, led to the adoption of the new apparatus and mode of proceeding herewith submitted, which have so far given the highest satisfaction in the management of this stubborn class of cases.

It is proposed to introduce, as a new feature, compression upon the approximated edges of the fistula, to bring them with greater certainty into firm, even contact, and effectually to exclude the passage of urine between the denuded surfaces. There seems to be no good reason for the fear entertained by some of injurious effects from such pressure; on the contrary, experience has thus far shown it to be not only unobjectionable, but a valuable means to the end in view.

The combined splint and compress represented in fig. 1 is made of sheet lead, of such thickness as will admit of being easily moulded to the vaginal curve, and at the same time retain the form given to it. The notches in the lower edge are made with a fine saw, and should be of such width as to embrace the wire closely.

The edges of the fistula are pared, and sutures intro-

duced as usual, entering the needle,—say, three eighths of an inch from the edge of the mucous membrane, and, carrying it down into the connective tissue, to bring it out as near as possible to the edge of the vesical membrane. The wires are now passed through the holes in the plate, and secured by perforated shot; then, adjusting the wires with an equal tension upon each, draw down the splint upon the posterior lip of the fistula, as shown (in half-size) by fig. 2.

If traction be now made upon the wires, it will be evident that the upper portion of the vagina and the uterus are under full control, and may be drawn down at will; and also, that by means of a thin wooden spatula placed beneath the wires, an equal force may be safely exerted for carrying up the anterior lip. Fig. 3 represents the fistula as closed, and the splint turned up permitting a free inspection.

The wires are now to be lifted into the notches by means of a small fork, and secured by tying or twisting as heretofore practised, or by the method represented in fig. 4, which consists in simply looping the fore ends of the wire together; then, with an artery forceps seizing the loop, make the twist as shown in successive stages.

When we take into consideration the danger of the reproduction of the fistula in subsequent childbirth, the impropriety of *reducing the calibre* of the vaginal tube, if it can be avoided, is sufficiently manifest. Repeated observation has shown, that when very large openings are closed in the transverse position of the splint, by dragging down the uterus, the contractility of the uterine ligaments elevates that organ again to its former position, and the tube apparently regains its normal dimensions. These considerations, together with the facility afforded by the new apparatus, dictates this transverse closure in all large fistulæ. Smaller ones may with propriety be treated in the same manner.

The advantages proposed in the adoption of this method are:—

1st. The perfect control over large and obstinate fistulæ

for their closure without the necessity for dissection or extensive incisions.

2nd. The opportunity afforded of inspecting the parts until the approximation is entirely satisfactory.

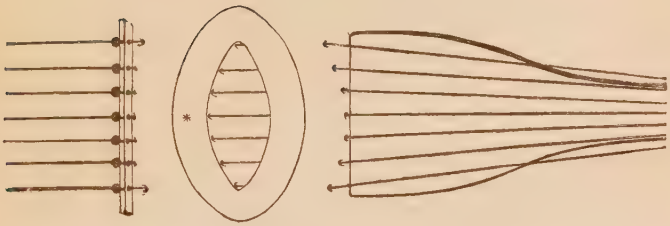
3rd. The traction upon the wires and counter-pressure being in a direct line, the edges of the vesical mucous membrane must first come into firm apposition before the more superficial parts are approximated, rendering the coaptation both easy and certain.

4th. The compress, by still further condensing the tissues, gives additional security against leakage, while it splints the part, keeping it at rest, and offers an even surface for moulding a smooth and handsome cicatrix.

Fig. 1. (Full size.)

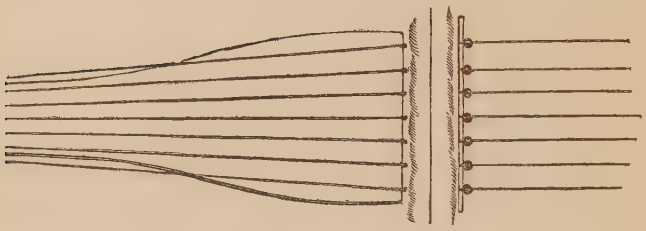
Represents the splint made from sheet lead.

Fig. 2. (Half size.)



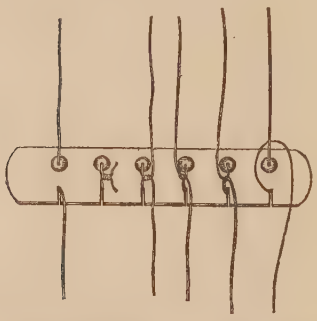
Shows the sutures in place, the splint turned upon its edge, and the wooden spatula applied to the proximal lip of the fistula.

Fig. 3. (Half size.)



The opening has been closed by longitudinal traction upon the wires, while counter-pressure is used by means of the wooden spatula.

Fig. 4. (Full size.)



Shows in successive stages a convenient mode of securing the apparatus, by twisting the ends of the wire together.

ON THE

STATISTICS OF MIDWIFERY,

FROM THE RECORDS OF PRIVATE PRACTICE.

BY

ROBERT DUNN, F.R.C.S., &c.

Read Nov. 2nd, 1859.

UNDER this title, and as one amongst the great body of general practitioners in medicine, surgery, and midwifery, I would avail myself of the invitation which was held out to us by our worthy and distinguished president, Dr. Rigby, in his admirable opening address, and lay before the fellows of the Obstetrical Society a summary view of the midwifery records, for twenty years of the busiest period of my professional life. I do this in the hope of inducing other general practitioners, whose powers of observation are of a higher order than mine, and whose opportunities have been more extensive and practice more varied, to follow in my wake, and to give to our Society the results of their experience; for I cannot help thinking—and I wish to give expression to the thought—that the records of general and private midwifery practice may be *advantageously* and *usefully* contrasted with the statistics of our lying-in hospitals and public institutions. Nay, I am even inclined to the opinion, that from the former truer and more important estimates may be deduced. As for myself, I have laboured among the working and middle classes, and it is, therefore, only upon that section of society, in this vast metropolis—and an important section it is—that my own observations and experience can be directly brought to bear. But, at the same time, I do hope, seeing how important is the

influence, which the *different modes* and *habits* of life have upon the parturient process, that other fellows of the Obstetric Society, in the highest as well as the lowest walks of our common profession, will not be wanting to supply the desiderata, in relation to the other grades and ranks of social life; not only to the highest, to those living in the lap of luxury, surrounded by the elegances, and enjoying all the indulgences of life, and not necessarily, therefore, called upon to make either mental or bodily exertion, but also to the lowest—to those sunk in the depths of indigence, ignorance, and penury, and often without even the ordinary comforts of life. The contrast which such comparative statements would present, could not fail of being alike *interesting* and *instructive* to every observant and reflecting practitioner. With these brief remarks I will proceed to the subject matter of this paper. From 1831 to 1850 inclusive, comprising a period of twenty years, I have recorded 4049 cases of midwifery, as occurring in my practice. Of these, after deducting 228 for premature births and abortions, there were 2133 male and 1688 female children. The greatest number I have registered in one year is 265, in 1838. But of these I do not wish to convey the impression that I attended every individual case of midwifery myself, for, in my unavoidable absence, some were attended by my assistant for the time being, and for attendance upon others I was indebted to the courtesy and kindness of friends and neighbouring practitioners. Among my greatest achievements in this department I have a note of having personally attended, on one occasion, seven labours in thirty hours; and, in 1832, during the prevalence of the epidemic influenza, which raged almost *universally* in the metropolis, of having, in one day, visited and prescribed for seventy patients, and attended three midwifery cases.

The total maternal mortality was 27. Of these 21 deaths occurred in immediate connexion with parturition, and the other 6 from remote or accidental causes during the puerperal state. There were—

2 deaths from *flooding*, 1 *before* delivery was effected, and 1 four hours *after* it, from internal hæmorrhage.

3 deaths from *exhaustion*, soon after child-birth. In 2 of these there was excessive hæmorrhage *before* delivery, and in the other none, either before or after, but an advanced stage of phthisis.

2 deaths after craniotomy, 1 in whom there existed a tumour at the neck of the womb, the patient sank from exhaustion undelivered, after the head was perforated; the other from sloughing of the bladder and vagina.

1 death from inflammation of the uterus.

3 deaths from puerperal peritonitis.

5 deaths from puerperal fever.

2 deaths from phlegmasia dolens.

3 from puerperal mania.

21

2 deaths from disease of the liver.

1 death from disease of the lungs.

1 death from disease of the heart.

1 death from disease of the brain.

1 death from scarlatina.

6

In regard to plurality of children, there were 2 cases of triplets, in one of which each of the children had a separate placenta, but none of them lived. Forty-five cases of twins, in the great majority of which both the children were in connexion with one placenta. I met with 3 cases of *monstrosity*, and one of them may be worthy of a passing notice. I published the case in the 'Lancet,' for April 27th, 1844, soon after its occurrence. It was the fourth child of the mother, and her former children had all been born healthy and well formed. The presentation was natural, and the labour an easy one. The child cried feebly on entering the world, and it died in the course of an hour afterwards. The head and chest were well developed, and the only irregularities in the upper extremities were a congenital dislocation of the right hand, at the wrist, and a very diminutive thumb, attached by mere common integument. Instead, however, of lower extremities, the

body of the child, from the umbilical region, tapered gradually downwards and terminated in a point, with a high concavity forwards, and had the osseous structure which it contained covered with muscles and common integuments, like the other parts of the body. When the extreme point was pressed upon, the child was thrown into a kind of convulsive agitation. There were no genitals in front and no anus behind. It was that form of monstrosity which Dr. A. G. Otto, in his celebrated work, which contains the description of 600 monsters in the Museum of Breslau, published in 1841, has designated *Monstrum Humanum Sireniforme*. The placenta, in this case, was not in a normal condition: one half was much thinner than the other, and a hard ridge ran between them. The mother and her friends assigned, as the cause of the monstrosity, an impression that had been made upon her mind when she was about two months advanced in pregnancy, in connexion with a man in the street, without legs, and who was drawing himself about by means of some mechanical contrivance. But, be that as it may, it cannot be denied that there are many well-authenticated accounts of very *striking coincidences* between impressions made on the mind of the mother and appearances which have manifested themselves on the body of the fœtus. It is our duty to collect facts and to compare coincidences. In the language of Dr. Blundell "our prepossessions are not the criterion of truth; improbability and incompatibility may result, not from impossibility, but from our ignorance of the necessary explanatory knowledge. All is clear in speculation, but, somehow or other, it is forgotten in practice. *Doubt, observe, infer—still doubt,* and bring the truth to the test of the most vigorous examination. Truth never yet shunned the light; how can she? It is her element." On this interesting subject of inquiry I look hopefully forward to the agency of the Obstetrical Society, *for rigid accuracy and well-authenticated facts*; and surely, where so many observers are associated, much may be expected.

I met with one instance of the hydatidiform or vesicular

mole, respecting the nature of which Dr. Graily Hewitt has given us such an interesting and valuable paper. Occurring in the early part of my practice, it was the cause of some perplexity to me. I had attended the patient about eighteen months previously, when she gave birth to a fine healthy child. But, on this occasion, she was sure there was something wrong with her—she felt so differently; and from the sixth month, or earlier, was subject to slight hæmorrhagic gushes; still she went the full period of utero-gestation. When first called to her, I could not make out the presentation. I thought it was the *breech;* but, from her repeated slight attacks of flooding, I feared it might be the placenta. All obscurity, however, was soon removed by the rapid intervention of labour, and the sudden expulsion of a hydatiform mass, nearly the size of a child's head. The mother did well, and has since given birth to several healthy children. I could find no trace of a fœtus.

I have met with several instances of the *cranial blood-swellings,* about which Dr. Rigby has given such an instructive paper. The first, occurring many years ago, was the cause of some anxiety to me, and Dr. Golding was called in for consultation. He dispelled my fears, and recommended the constant application of a spirit-lotion. To this I have had recourse in all subsequent cases, and with the happiest results.

I had three cases of hare-lip, four of cleft palate, three of spina bifida, and five of imperforate anus, in two of these the children died. One of these was a case of obscurity and interest. In all, save in this, the septum, or obstructing membrane, felt to the finger *thin* and *elastic,* and only required to be divided or perforated, in order that the meconium might be discharged. In this, however, having passed up a trocar, as far as I thought it prudent and safe, without reaching the bowel, I asked my friend, Mr. Bowman, of King's College Hospital, to see the child. He suggested *Amussat's operation for artificial anus* in the left lumbar region, where the descending colon is denuded of peritoneum, and kindly

undertook to perform it. The operation, however, was not successful, for the colon could not be found. The child was nine or ten days old when it died. At birth it was a strong, hearty child—sucked vigorously at first, and continued to do so; but some hours after sucking, it always vomited matter of a fæculent character. On a post-mortem examination, the descending colon was found to be not larger in calibre than a *crow-quill,* and *imperforate.* The other viscera were *normal.*

About two years ago, my son, Mr. R. W. Dunn, of Clarges Street, soon after his appointment as surgeon to the Farringdon Dispensary, met with a similar case—a twin child of four days old. As in my own case, both the internal and external sphincters of the anus were natural, and the obstruction was an inch upwards. Not succeeding in reaching the bowel, after passing up a trocar for some distance, he opened the descending colon in the left lumbar region, through which the meconium was discharged. For some days after the operation the child appeared to be doing well—sucking heartily, and passing fæculent matter from the opening. But on the eighth day after the operation it was suddenly seized with sickness, and rapidly sank. No examination was permitted.

Of still-born children, in the 4049 cases, after subtracting the 228 premature births, there were in all, from whatever cause, 170; including in this number, putrid cases, funis, and preternatural presentations, forceps and craniotomy cases, as well as deaths from pressure in tedious and difficult labours. Of the last there were 30 cases. Of preternatural presentations I had upwards of 60 instances. Out of 11 cases, in which there was a prolapsus of the funis, 8 were born dead; and of these still-born children, in 3 instances a coil of the cord came down with the head, in 2 with the head and arm, in 1 with the foot, and in 2 with the shoulder. Out of 25 breech presentations, 9 were still-born, and of these 5 of the children were putrid. In breech presentations I have, more than once, lately had an opportunity of testing the value of the *ready method* of Dr. Marshall Hall, in cases where animation

has been suspended, and in the happy results which followed I can bear a willing testimony to its practical importance and value. I had 3 face presentations, and one of the children was still-born; 11 cases of face to pubes; 2 of head and arm, both dead; 3 of shoulder, and 2 still-born; 3 of hand, and 3 of footling cases.

I met with one case of natural labour which puzzled me, and I sent for my friend, Dr. Waller. The patient was in strong labour when I arrived, and I imagined at first that the child's head was actually entering the world. It did not, however, and upon careful examination, and in attempting to pass my hand around it, I found it was not the head. It turned out to be an *unruptured hymen,* in which Dr. Waller detected a small opening, not larger than to admit a crow-quill. A free crucial incision was made, and through this, after the next pain, the os uteri was readily felt, considerably dilated. The pains followed up, and the patient had a safe delivery and good recovery. I attended her in two or three subsequent labours, which presented nothing abnormal. I need scarcely say, that her husband was well pleased with the results of her first accouchement. I found that he had been aware of an existing impediment to sexual intercourse.

I must confess that I have had but slender experience in the use of the forceps, not having applied them myself more than twenty times during the twenty years I am now reviewing, and never on any occasion, *save once,* without the presence of a medical friend or my assistant.

During the period of my pupilage, Dr. Blundell impressed so deeply on my mind the importance of the adage, "*A meddlesome midwifery is a bad midwifery,*" that it afterwards became with me an abiding and ruling principle of action, so that whenever and wherever I felt the conviction, and, in the absence of any threatening danger to the life of the mother, that the natural efforts would eventually prove equal to the completion of the delivery, I have always been content to wait, and have avoided instrumental interference. But I have availed myself

freely, and with the happiest effects, of the use of the bruised ergot of rye, in half-drachm doses, infused in boiling water. It may be that I have erred, in avoiding at times the use of the forceps, and that their timely application, in some few instances, might have saved the life of the child, for my practice, in this respect, is certainly in striking contrast with the avowed and habitual procedure of some of the fellows of this Society. But I have, at any rate, the satisfaction of stating, that not in *one single* instance, which I have attended, has the tedious and difficult labour proved fatal to the mother after the birth of the child.

I may have had the *fear of injury* to the mother, from the use of the forceps, too vividly before my eyes; but still, I have seen injuries inflicted—cases never to be forgotten—and where the forceps were in skilful and experienced hands. It is but right however to observe, that since the time of Dr. Collins, and during the Mastership of Dr. Shekleton, the use of the forceps, in the Dublin Lying-in Hospital, has been far more frequent than it had been before. "They are now employed without hesitation, and considered an instrument most *easy of application, and safe to use.*" So say Drs. Sinclair and Johnston in their last report. But, still, I quite concur in the belief of Dr. Collins, "that where the patient has been properly treated from the commencement of her labour, where strict attention has been paid to keep her cool, her mind easy, where stimulants of all kinds have been prohibited, and the necessary attention paid to the state of her bowels and bladder, that, under such management, the *death* of the *child* takes place in *laborious and difficult labours* before the symptoms become so alarming as to cause any experienced physician to lessen the head." The stethoscope, indeed, seems to have placed this matter beyond dispute. But, once satisfied of the death of the child, I have not hesitated, nor would I ever hesitate, to have recourse, without delay, to craniotomy. For, surely, it would only be incurring needless pain and suffering; nay, worse—the *risk* of *exhaustion*, if we did not at once proceed to lessen the head of the child as soon as

we felt satisfied that it was dead. The use of the stethoscope in such cases is of the last importance.

I had 10 cases of craniotomy: 4, in consequence of distortion of the bones of the pelvis; 5, of impaction of the head; and 1, owing to a tumour at the neck of the womb. Two proved fatal to the mothers; one from sloughing of the bladder. One poor woman had been in labour for two days, and in the care of a midwife, before I was called to her, and was then in a state of great prostration. She died on the third day after delivery. The other was a case of some obscurity. The patient had been subject to gushes of bloody water from the fifth or sixth month after gestation, and to frequent diarrhœa. Her health gave way, though she went her full period. I could not make out the presentation—I thought it was *placental*, and so did other medical friends, as a spongy substance completely filled up the mouth of the womb. Dr. Blundell, however, after a careful examination, declared this to be a tumour, and said that he could, with his finger, reach the head of the child, which was still covered by the membranes. These were ruptured, and the head, after some difficulty, opened. But then humanity said, *desist*, for the poor creature was completely exhausted and sinking fast. Cordials and stimulants were useless. She died undelivered. At the autopsy there was found, within the cavity of the womb and at its neck, an *encephaloid tumour*, as Dr. Blundell had foretold.

In two instances craniotomy was had recourse to, for a second time, on the same woman, and in subsequent pregnancies premature labour was induced. In six other cases I brought on labour at the seventh month, by rupturing the membranes, but in no instance, save one, did the child survive. Of placenta prævia I had three cases, and since 1850, and subsequent to the promulgation of Dr. Simpson's views and mode of procedure, I have had three more. In about thirty instances I have found the placenta adherent, and requiring the introduction of the hand; in four I met with the hour-glass contraction.

These bring me to the subject of uterine hæmorrhages, than which I know of nothing in the practice of midwifery more fearfully alarming at times, nor requiring at our hands greater promptitude and decision of action. In the retrospect of five and thirty years' experience *none* are so vividly recalled to my own mind, and I believe I may confidently appeal to the experience of every fellow now present for an accordant testimony. In respect to the treatment of placenta prævia, time was when such was the conviction of my own mind, and most probably it was that of many who are here, but founded on purely theoretical views, that the abstraction of the placenta *before* the birth of the child would be tantamount to sealing the doom both of the mother and the child. But Professor Simpson, and personal experience, have since taught me a different lesson, and one of great value from its practical importance. Many years ago I had an opportunity of exhibiting, at the Westminster Medical Society, a placenta which conveyed an instructive lesson. In this case the lady had been subject to frequent hæmorrhagic attacks from the second or third month of utero-gestation up to the time of her delivery, which took place about the seventh month. I had advised rest, the horizontal position, and the usual remedial measures; but the slightest exertion brought on the hæmorrhage, and, from such repeated losses, her general health was much impaired. About the seventh month she had an attack of such violence that I thought it expedient to induce premature labour, and with this intent I plugged the vagina with sponge dipped in vinegar. The flooding was arrested and labour followed. As the os uteri dilated I found the placenta and funis presenting, and I delivered by turning. The point to which I was anxious to direct the attention of the Society was the condition of the placenta. The contrast between *the detached and the undetached portions* was most striking, for while the latter was blanched and more pale than natural, *the former was seen to be gorged with blood.* The source of the hæmorrhage in such cases is, of course, the great point of practical import-

ance, and the condition of the placenta in this instance presented conclusive evidence, to my mind, of the truth of Dr. Simpson's opinion, that the *detached portion* of the placenta had afforded the channels through which the blood had *gushed.* Twelve months afterwards I had the satisfaction of witnessing Dr. Simpson's method brought to the test of experience, and the result was most gratifying to me.

On Saturday night, September 29th, 1849, after retiring to bed, and without any assignable cause, Mrs. L—, æt. 37, and in the last month of utero-gestation, was suddenly seized with flooding. It was her sixth pregnancy. I had attended her on all former occasions; her labours had been unattended with difficulty or danger, and her children had all been born alive. On the arrival of my assistant, in my absence, the flooding had considerably abated, but he found her complaining of faintness, and sitting up in a chair. She was immediately placed in the recumbent position, and the discharge gradually subsided. He remained with her two hours. On my visit next day I found there had been no return of the hæmorrhage; her only complaint was a feeling of weakness from loss of blood.

She went on well until the following Wednesday (October 3d). On that day I found her out of bed, on the sofa, and free from discharge; the same night, however, after she had been in bed and asleep, the flooding suddenly returned, and I was hastily summoned. When I arrived it had greatly abated. I made, notwithstanding, an examination; but, owing to the nearly closed condition of the os uteri, no satisfactory information was elicited. I remained some hours, but there was no return of the hæmorrhage until the Saturday following (October 6th), when it reappeared suddenly between eight and nine o'clock in the evening.

I then satisfied myself fully as to the nature of the case—*the placenta was lying over the mouth of the womb.* The os uteri was beginning to dilate, but there were no regular parturient efforts. About three o'clock in the

morning there was a sudden gush of discharge, which greatly alarmed her, but which I found to be the liquor amnii. I could then, by passing up the finger anteriorly, through a small opening, where the edge of the placenta was not attached, detect the head presenting. As the os uteri was now more fully dilated, and the uterine efforts were very irregular, I gave a dose of the secale cornutum, in the hope of exciting more energy of action, but without effect. I then explained to Mr. L—, who is a sensible and intelligent man, the real condition of his wife, that he might hold himself in readiness to bring in any medical friend I might wish to my assistance. At seven o'clock I thought the time to interfere had arrived; and, being in the neighbourhood of Finsbury Square, I sent him for Dr. Waller, who promptly attended. At the time there was a mere drain from the uterus, but the loss of blood had been very considerable. The face was blanched; the pulse weak, though not inordinately quick. The stomach retained nourishment, and there was no restless agitation. On examination, Dr. Waller found precisely the condition which I had described to him.

We consulted together, and agreed that the time for interference had arrived, and that we would adopt the method recommended by Dr. Simpson, and complete the detachment of the placenta from the uterus. By the dilation of the os uteri the greater part of the central mass of the placenta was separated, and Dr. Waller detached the remaining adherent portion from its uterine connexion, but the placenta was not removed from the uterus. The clots were removed from the vagina, and the external parts were carefully wiped with a napkin; for a minute or two we waited to see whether the *separation* had given rise to a renewal of the hæmorrhage, *but not the slightest drain occurred.* As speedy delivery was the only chance for a living child, Dr. Waller reintroduced his hand, and delivered with facility by turning.

Although at birth the infant showed but feeble symptoms of vitality, the respiration at first being weak, irregular, and

difficult, by the employment of the usual means for the recovery of asphyxiated children complete resuscitation took place, and he is now a fine healthy boy. The mother had not an untoward symptom afterwards, and has since that time given birth to another child, when the presentation was natural. Nothing could be more gratifying than this happy result.

Dr. Waller has published a series of interesting cases of placenta prævia, in the 'Medical Times and Gazette,' in illustration of this successful mode of treatment, all tending to establish the important point, that the hæmorrhage, in detached placental cases, is effectually arrested by the *entire destruction* of the connexion between the placenta and the uterus. As a general rule it may be advisable not to remove the placenta immediately from the womb, after its detachment, for an obvious reason; but, at the same time, the management of all such cases requires special consideration, and while the practical and all-important point—the arrest of the flooding—is of vital importance, the varying peculiarities of each individual case must regulate our conduct in other respects. In the early part of my professional life I met with two or three fatal cases of hæmorrhage, which have left lasting impressions. In 1832 one was a case of *internal hæmorrhage* after delivery, and the only one that I have ever witnessed. It was her second accouchement. I attended her in both. She had a good time, and in half an hour after the birth of the child the uterus began to contract firmly. On examination, I found about half of the placenta expelled from the womb, in the vagina. A dose of ergot of rye brought on still more forcible pains, but failed to expel the placenta. On introducing the finger I found the retained portion of the placenta firmly adherent to the side of the uterus, the adhesion was carefully separated, and the placenta extracted. The patient complained of pain, was low and exhausted, but the uterus felt well contracted, and there was no external flooding. After having remained some time I left her, as I thought, comfortable and safe. I was suddenly recalled, three or

four hours afterwards, and found her in a sinking state; great oppression in the breathing; the pulse intermitting, and scarcely to be felt; great restlessness, faintness, and a wish for fresh air. She never rallied, and before arrangements could be made for a trial of *transfusion* she expired. There was no external flooding, but the womb felt as if considerably enlarged, and its cavity, on being opened, contained more than a pint of clotted blood.

In another case, which occurred a little while afterwards, I was hastily called to a poor woman in my immediate neighbourhood, who had been suddenly taken in labour, with *flooding*, between the seventh and eighth month of pregnancy. The loss of blood had been great. Her face was blanched and pale, the extremities were getting cold, and the pulse was extremely feeble. There were slight expulsory pains and occasional hæmorrhagic gushes. On examination, I found the os uteri well dilated. I ruptured the membranes, the head descended, and the hæmorrhage ceased. But the prostration now became truly alarming. Egg and brandy, ammonia and ether, and other stimulants, were freely given. The pulse at the wrist was scarcely to be felt. I sent off at once for Dr. Waller, requesting his immediate attendance, and that he would bring his *transfusion* apparatus with him. He promptly attended, but before his arrival she had rallied a little, and as the improvement appeared to be progressive, we sat by her bedside for more than two hours, and eventually, in consequence of this progressive improvement, abandoned the idea of *transfusion* for the time. An opiate was given, and we left, my assistant remaining to watch her, and to recall us, if required before the morning. About four hours afterwards I was hastily summoned, and arrived just in time to witness her *final vital* efforts, for under the last expulsory pain, which forced the child's head into the world, *she herself expired.* The recollection of that hour is fresh in my remembrance, as well as the regret of Dr. Waller and myself, that we had not effected *transfusion.*

During the past year I had a similar fatal case. The

patient was the wife of a fruit dealer in Covent Garden Market, whom I had previously attended in five or six confinements, and who, on more occasions than one, had evinced a *proneness* to *flooding after delivery*. About eighteen months prior to her last accouchement she had a premature labour, between the seventh and eighth month, of a putrid child; and on that occasion there was great hæmorrhage before the birth of the child, and she had a narrow escape with her life. She was a woman of active business habits, and always kept about until the last moment of utero-gestation.

On the morning of Saturday, September 25th, 1858, she, as was her wont, was early in Covent Garden Market, and was there suddenly seized with the pains of labour. A violent flooding came on, and it was with great difficulty, in consequence of the exhaustion and faintness which followed, that she was got home, in a cabriolet, to Henrietta Street. I was immediately summoned. I found her in a state of extreme prostration, with a weak, intermitting, and fluttering pulse. Egg and brandy, beef tea, ammonia, and other stimulants, were freely administered. On examination, the os uteri was found to be considerably dilated, the membranes ruptured, and the head presenting. *The hæmorrhage had ceased, nor did it recur.* She soon began to rally, and I hoped for the best, but it proved otherwise. It was my object to retard labour, and to recruit the vital energies, but unfortunately with returning strength the parturient efforts were renewed. She gave birth to a stillborn child, and then, from *sheer exhaustion*, rapidly sunk herself, before the placenta was expelled, for there was no *further loss of blood.*

To three other fatal cases but *not from hæmorrhage*, I must briefly advert, for they have left lasting impressions behind them. In one of these the mother was in the last stage of phthisis, and much emaciated. Her labour, as all her former labours had been, was easy and natural, and rather quick than otherwise. Notwithstanding, the last throes were *fatally exhausting*, for, in giving life to

another, she yielded up her own. The child was strong and hearty, and is now a fine active boy. In the next case the birth was premature, between the fifth and sixth month of gestation. About two years previously she had given birth to a *stillborn* child at the full period, and in the interval had had a miscarriage at three months. On this occasion there was no *flooding*, but great œdema of the legs and feet, difficulty of breathing, and oppression at the chest. She was subject to asthmatic attacks, and could not, at times, lie down in bed. During one of these attacks, and complicated with bronchitis, she was taken in labour, and I was sent for. Bearing in mind what she had suffered in her first confinement, which was both tedious and difficult, ill as she was in other respects, I found her rejoicing in the prospect of a speedy delivery; she bore up wonderfully well as the labour progressed, but sank from *exhaustion* on its completion.

The third case, though less distressing than these to witness, was to me still more interesting and *instructive*. I was hastily called one morning, many years ago, long before the introduction of chloroform into the practice of midwifery, to a poor woman in a fit. She had been suddenly seized; the deep stertor, and profound coma, at once revealed to me the real character of the attack as I approached her. *It was an apoplectic seizure*, for there she lay upon her bed, hemiplegic on her right side, with a complete abolition of consciousness, and the phenomena of life reduced to a mere series of automatic movements. Pregnancy had not even been suspected, but strange to say, and to the astonishment of every one around her, there was found the next day in her bed, and while she still lay in this comatose condition, a fœtus of five or six months, which had been expelled from the uterus. She never recovered her consciousness, and died on the third day of the attack. Among the remedial measures which I had recommended, were turpentine enemata, and it may perhaps be reasonably inferred, that the turpentine had been instrumental in rousing into activity, the *reflex action* which had

effected the expulsion of the fœtus from the womb. To the late Dr. Marshall Hall, as the expounder of the doctrine of reflex actions, is due the honour of rendering clear and intelligible much that was previously obscure, if not indeed inexplicable in the parturient process, and though Dr. Carpenter was among the first to perceive and appreciate the influence of *remote* reflex actions, as effecting the expulsion of the child from the uterus, it is to Dr. Tyler Smith that we are so greatly indebted for a complete exposition of the subject.

In the instance I have cited, the child was expelled from the uterus during a state of coma, as profound and deep as in any degree of narcotism, which could with safety to the patient be induced from the inhalation of chloroform. I need here perhaps scarcely observe, that I presumed to bring the subject of "*the inhalation of chloroform, its anæsthetic effects, and its practical uses,*" under the notice of the Royal Medical and Chirurgical Society, in a paper which was read and discussed in these rooms on April 22d, 1851, and afterwards published in the 'London Medical Gazette.' In this paper I attempted to trace the *order* and *sequence* in the effects of the inhalation of the vapour, upon the different nervous centres of the encephalon, and through them upon the sensational, perceptive, and intellectual phases of consciousness. And in relation to midwifery, while I noticed the important fact, never to be forgotten by the obstetric practitioner, that *immunity from pain* may be secured without the suspension of intellectual consciousness, I likewise observed, that as the spinal and ganglionic systems upon which the parturient act essentially depends, are the *last* to come under the dominion of chloroform, we run no risk of interfering with, or of arresting their actions, if we only use common care and ordinary prudence in its administration.

But, although I am deeply impressed with the weight of the obligation we are all under to Dr. Simpson, for the valuable boon he has conferred upon the obstetric practitioner by the introduction of the use of chloroform into the

practice of midwifery, I am nevertheless inclined to the opinion, that invaluable as its use is, in some preternatural and instrumental cases, still, as a *general rule,* in ordinary and normal labours, *anæsthesia is uncalled for,* and in consequence, in such cases, I have rarely induced the condition. Of the value of chloroform in puerperal mania, I have not had many opportunities of judging; but, in those which I have had, I have found in it a valuable resource and an efficient agent, for calming down "to stillness of soft sleep" excited and disturbed conditions of the emotional states. Of this distressing malady, twelve cases have come under my notice: three of these were acute, ran a rapid course, and terminated fatally; fully confirming the sage prognosis, in such cases, of Dr. William Hunter, who said,—"*When the patients are out of their senses, attended with fever like paraphrenitis, they will in all probability die.*" In all the three there was an exceedingly rapid pulse, febrile disturbance, great *emotional* excitement, and mental illusions. In one case, in which Dr. Blundell was consulted, local depletion by leeches was had recourse to, but in no case was venesection practised. These cases occurred before the introduction of chloroform. I had the advantage of a post-mortem examination in two of them. Although they appeared to sink from exhaustion, there was a congested condition of the vessels of the brain, and some effusion under the arachnoid membrane, and into the ventricles.

The other nine cases, save one in whom the disease became chronic, and who has found an asylum for life among the incurables of St. Luke's Hospital, were all restored to health, at varying periods from one month to six, and have since been found equal to the discharge of all the relative duties of life. In one of the fatal cases the placenta was found adherent; there was an hour-glass contraction of the uterus, and the hæmorrhage was great. Indeed, I may say, in all the cases, with the exception of two, in which there existed an hereditary tendency to mental disease, the loss of blood had been great.

In puerperal convulsions, I have had no experience of the

value of chloroform. In the four cases which I have witnessed, none proved fatal to the mother. The attack of convulsions in one instance did not supervene until after the birth of the child and the expulsion of the after-birth. The urine was albuminous, and there was œdema of the legs and feet. In the other cases, the duty was imperative to expedite the labour, for the sake and safety of the mother, the forceps were used, and craniotomy practised.

I met with six cases of phlegmasia dolens, and two of them terminated fatally; three of scarlatina, and one died.

To conclude,—I regret that I cannot furnish a correct report, either as to the *number*, *character*, or *final issue*, of the cases of *puerperal fever* which occurred during the period I have been surveying, and am glad to say I have of late years seen little of this truly formidable disease.

STATISTICS OF MIDWIFERY,

IN THE PRACTICE OF

H. W. BAILEY, F.R.C.S., OF THETFORD,

From July 2nd, 1808, *to December* 31*st*, 1858.

(WITH TABLES.)

Read Dec. 7th, 1859.

OF late years several statistical reports have been published from various lying-in institutions, from which some valuable information is derived, and in order to compare those with provincial obstetrics, I have been induced to offer a table of my practice in this department, that a comparison may be made as to the months and seasons in which the greater number of births take place, and also the proportion of preternatural cases to the natural.

The births during fifty years amount to 6476, of which 3290 were boys and 3186 were girls, a proportion similar to that found in other statistical tables. Of these births there were 53 cases of twins, comprising 63 males and 38 females —21 were stillborn. And 1 case of triplets, born and lived until the following morning; they were small, but well formed. The preternatural cases are 356, leaving 6120 head presentations. Those which presented with the face to the left side were most easy, and generally terminated within a few hours, requiring little or no assistance, unless under peculiar circumstances. Those labours which present with the face to the right side are more tedious and lingering, the pains being more severe and less effectual. Whenever I have been able to ascertain, I have invariably found the feet and arms to the belly of the mother, by which the uterus contracts upon an uneven surface, probably

causing the delay, and provided power is sufficient and no untoward symptoms occur, nature may effect the termination of the labour. In many cases, however, the contrary takes place; no advance is made, the os uteri being fully dilated, it becomes requisite to give assistance, either with the forceps or by turning and making it a foot case, by which much suffering is saved and the labour is soon terminated with safety both to mother and child. When the head descends with the hand or funis, the same position of the child in utero takes place; in these cases the uterine pains are very severe and forcing. Under such circumstances, although time may be given, and for many hours no further descent made, it becomes necessary to effect the termination in the same way as in the above presentation, in order to save the life of the child.

Of the preternatural cases, forty-four were of the arm or hand. In these cases I have generally observed the pains to be slight and sometimes cease for some hours; the membranes are generally ruptured and the hand in the cavity of the pelvis. In some cases the os uteri is firmly contracted above the elbow. If this state has been of long duration, and the mother exhausted, I endeavour to dilate the os uteri by insinuating my finger and pushing up the arm, carefully and gradually, until I reach the feet, and thus have terminated many cases with happy results in every respect.

Of funis presentations there have been twenty-one cases. In many of these I have not been sent for before the rupture of the membranes, and then have found the funis protruding from the external parts. Upon examination the full dilatation has been found, and as the return of the funis was impossible, I delivered by the feet, with safety to the child. One or two cases, in which the death of the child took place, occurred to me.

Of breech presentations there were forty-five cases, many of which were mostly terminated with but little assistance. In these presentations, if the head descends at

the brim of the pelvis with the face to the pubis, then assistance becomes imperative, in order to save the child's life, and that quickly, to avoid too long pressure on the funis. I do not recollect losing any fatal case in this presentation.

The most difficult of the preternatural presentations, if it may be so called, is that of the *face*. In these cases the occiput is thrown back on the neck, forming a wedge, presenting across the brim of the pelvis sometimes, and the chin either to the pubis or sacrum—the difficulty is increased in either position. The pains are frequently very severe and forcing, continuing many hours. Should the os uteri be well dilated and the membranes entire, the face can be pushed up by the finger. In these cases the forceps are mostly required, and although some cases may be terminated by the natural efforts, yet the greater number require urgent assistance, and, unless given timely, the life of the child becomes sacrificed, if not the mother also, from exhaustion. Having waited until a full dilatation is effected, the more easy method is by turning the child, and thus terminating the labour with perfect safety. Of the forty cases under my care I have never met with the loss of child or mother. The presentation of the *abdomen* or *back* of the child is of rare occurrence. I have had under my care only nine cases, the funis being generally round the neck; these require the child to be turned. In these cases, the sacrifice of the child is more likely to occur. This has happened to me in two cases, in which the funis, being a short one, was twice tightly coiled round the neck. *Feet* presentations were more numerous; with these are not included those occasioned by turning in utero. The 180 cases were actually and primarily cases in which one or both feet presented. These cases are not numerous, considering the number of births; they only require the usual assistance. Some of the children are born in a state of asphyxia, but restored after a short time.

The most alarming cases, and those productive of most

anxiety to the accoucheur, are cases of placenta prævia with profuse hæmorrhage, and especially when the os uteri continues contracted so as not to admit of any assistance to be given. In the course of my practice I have met with seventeen cases of the most serious kind. There was one case of expulsion of the placenta before the birth of the child, with dreadful hæmorrhage. I immediately turned the child, and delivered by the feet—the woman being unconscious during the time. This being a rare case, I published it in the 'London Medical Repository,' vol. xvi. Whenever called to a placenta case, whether partially attached to the os uteri, or completely over it, accompanied with hæmorrhage of some duration, I have found it expedient gradually to dilate the os and introduce my hand, and deliver by the feet. In every case I have succeeded in saving both mother and child in those cases where the full time of gestation has been completed. In hæmorrhage arising from partial attachment, the fœtus is usually dead, and expelled with the placenta. I have met with only two deaths from hæmorrhage at the time of birth—they were attended by midwives. The loss was profuse; the one died before I arrived, and the other a few minutes after. Two cases of sudden death have occurred to me after labours of only a few hours' duration. One took place about five hours after confinement; no hæmorrhage or syncope had occurred. The patient was talking with the nurse a few minutes before, and suddenly expired; the other case proved fatal about an hour after labour, without any evident cause. A post-mortem examination was made in both cases, but no cause could be assigned. It has fortunately fallen to me, in this large number of births, to have had only two cases of embryotomy, in both of which the heads of the children were of enormous size and firmly impacted at the brim of the pelvis. In one the placenta was hypertrophied, and the woman died the following day from exhaustion; the other from enlarged and diseased liver. The other deaths in the summary were from phthisis and peritonitis within the month.

STATISTICAL TABLE OF MIDWIFERY,

In the Practice of H. W. Bailey, F.R.C.S.E., *of Thetford, Norfolk, from July* 2*d*, 1808, *to December* 31*st*, 1858.

Years.	1808.		1809.		1810.		1811.		1812.		1813.		1814.		1815.		1816.		1817.		1818.		1819.		1820.	
Months.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
January	...	...	9	6	7	11	6	3	5	3	3	1	4	1	3	3	3	4	2	4	6	3	7	2	2	5
February	...	...	3	12	8	6	5	8	5	3	2	3	3	4	...	4	2	3	1	4	4	5	5	6	11	3
March	...	...	6	4	6	10	4	6	5	...	2	1	2	7	8	1	3	4	5	2	2	6	5	3	3	3
April	...	...	9	11	10	6	4	8	3	1	5	2	3	4	5	4	6	4	9	6	6	1	4	6	1	6
May	...	...	5	9	7	9	9	4	1	3	1	5	5	1	6	2	3	8	6	4	5	2	2	2	4	4
June	...	...	6	8	9	5	7	4	...	4	2	3	4	4	1	4	4	3	3	5	2	4	6	1	6	2
July	7	5	9	7	5	6	1	2	1	4	4	1	5	6	1	2	5	6	2	3	3	3	1	4	6	1
August	6	9	7	9	11	10	2	3	3	5	5	4	4	3	6	...	7	1	3	2	2	6	3	4	1	1
September	12	10	6	9	9	10	3	2	1	4	3	3	4	3	6	2	4	3	4	2	3	4	6	1	1	9
October	7	10	7	11	6	5	1	1	4	2	6	1	7	...	3	1	5	3	4	2	2	2	8	5	6	2
November	9	7	5	14	8	6	2	4	5	...	3	2	5	3	4	3	5	7	3	4	3	4	1	6	2	2
December	5	8	9	7	10	7	5	4	3	3	4	2	7	3	3	4	2	3	3	5	2	4	3	9	2	7
Total	46	49	81	107	96	91	49	49	36	32	40	28	53	39	46	30	49	49	45	43	40	44	51	49	45	45

Statistical Table of Midwifery.

(*Continued.*)

Years.	1821.		1822.		1823.		1824.		1825.		1826.		1827.		1828.		1829.		1830.		1831.		1832.		1833.	
Months.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
January	5	5	7	1	7	6	7	10	6	5	4	5	3	4	10	9	6	9	4	5	10	4	5	6	9	8
February	6	4	9	4	3	4	4	3	5	8	6	2	11	3	8	4	5	...	3	3	6	3	9	3	11	2
March	8	3	1	4	6	9	3	3	5	8	...	5	9	4	5	5	4	6	2	4	11	5	3	5	10	9
April	4	3	6	4	6	4	5	5	2	7	7	5	4	4	5	6	5	6	3	5	5	6	5	5	5	6
May	5	9	5	5	4	5	3	2	2	3	6	3	3	3	6	4	7	6	8	5	10	7	5	6	2	6
June	7	4	6	1	1	5	3	3	3	3	3	3	2	4	1	3	6	5	5	3	6	3	3	9	7	2
July	3	2	2	6	5	6	7	5	4	2	2	2	3	4	4	5	6	2	5	4	1	5	5	2	4	6
August	4	1	2	4	4	6	3	9	8	5	4	6	3	6	6	6	4	6	9	8	1	4	5	3	5	...
September	4	6	6	3	7	5	4	3	7	...	6	3	4	6	6	3	5	7	5	6	4	4	3	9	5	4
October	...	3	2	4	4	3	3	2	4	5	5	3	3	6	6	4	3	4	4	4	3	3	6	9	3	5
November	7	3	1	4	5	3	1	4	4	1	5	7	3	4	3	2	4	5	5	9	2	5	6	6	4	1
December	7	5	7	2	2	3	7	4	7	3	5	7	3	6	3	3	1	6	7	8	6	9	12	3	6	4
Total	60	48	54	42	54	59	50	53	57	50	53	51	51	54	63	54	56	62	60	64	65	58	67	66	71	53

Statistical Table of Midwifery.

(*Continued.*)

Years.	1834.		1835.		1836.		1837.		1838.		1839.		1840.		1841.		1842.		1843.		1844.		1845.		1846.	
Months.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
January	12	1	5	3	3	7	7	8	8	4	10	5	5	3	5	4	9	5	11	10	3	7	9	9	2	4
February	4	3	5	7	2	3	3	4	10	3	7	3	8	4	1	7	6	9	8	7	4	7	7	7	11	8
March	6	7	6	9	7	2	5	8	7	6	9	7	6	5	10	5	5	3	8	5	9	9	10	11	8	10
April	4	6	5	3	4	8	6	5	8	10	8	4	5	5	3	6	7	5	3	4	9	3	10	4	8	9
May	3	4	6	6	10	3	7	1	4	4	3	9	9	5	7	5	7	6	5	6	6	7	5	12	8	10
June	4	6	8	5	3	8	5	4	4	2	5	5	9	3	8	8	5	7	12	6	9	6	9	7	9	10
July	8	1	3	5	6	6	6	4	6	7	6	6	5	7	3	6	5	5	8	6	7	7	2	6	8	3
August	3	3	11	12	3	6	10	8	2	4	6	4	5	10	3	10	3	8	8	3	6	8	8	6	5	13
September	3	9	4	3	2	4	3	7	5	6	4	3	5	1	6	10	8	3	10	4	12	10	6	7	3	13
October	4	6	6	4	2	4	3	4	6	6	9	2	5	3	7	3	9	3	9	7	13	5	7	6	4	...
November	2	9	1	5	4	6	3	1	5	6	8	3	4	8	10	3	6	4	7	5	3	5	5	6	6	6
December	1	8	3	14	6	3	2	4	1	6	9	7	5	5	5	5	3	5	6	8	6	11	12	11	8	3
Total	54	63	63	76	52	60	60	58	66	64	84	58	71	59	68	72	73	63	95	71	87	85	90	92	80	89

Statistical Table of Midwifery.

(*Continued.*)

Years.	1847.		1848.		1849.		1850.		1851.		1852.		1853.		1854.		1855.		1856.		1857.		1858.	
Months.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
January	9	11	11	2	3	6	5	8	8	6	6	5	3	12	7	9	6	6	9	4	4	10	7	5
February	8	4	11	3	8	12	8	7	13	8	10	7	4	5	4	5	5	4	8	3	5	4	4	4
March	10	8	10	9	5	9	7	12	16	6	4	10	5	7	2	3	7	7	14	11	5	7	3	6
April	6	3	4	6	2	7	7	4	4	5	8	3	6	10	6	7	10	5	6	1	8	4	6	6
May	9	11	4	5	7	7	2	7	6	10	5	9	5	5	8	8	6	3	8	10	7	9	10	7
June	4	5	2	11	4	8	1	7	9	5	3	11	3	2	5	6	7	6	6	7	11	8	8	9
July	7	6	4	5	3	9	8	6	6	9	2	10	7	3	7	5	2	7	3	10	8	4	7	7
August	3	8	7	8	6	4	11	9	6	4	10	7	2	6	8	8	5	4	2	6	5	5	3	9
September	8	4	5	7	8	1	7	4	5	3	4	7	5	5	4	3	11	...	5	8	6	8	7	5
October	7	6	7	2	8	10	13	...	5	8	10	6	4	6	9	3	6	6	9	6	10	4	3	9
November	7	12	3	5	7	5	4	5	5	8	4	6	6	3	5	4	4	4	6	5	11	3	3	3
December	3	2	5	7	7	14	4	4	5	2	...	5	12	7	5	10	5	7	3	7	9	4	8	13
Total	81	80	73	70	68	92	77	73	88	74	69	86	62	71	70	71	74	59	79	78	89	70	69	83

Summary of foregoing Table.

Sex.	Months.											
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Boys . . .	307	299	312	280	280	256	238	259	274	287	234	264
Girls . . .	277	242	299	258	286	257	251	294	256	219	246	301
Total . .	584	541	611	538	566	513	489	553	530	506	480	565
	Total, 6476											

Presentations, &c.

Births, 6476.		Sex.		Twins.	Preternatural presentations.							Triplets.	Instrumental aid.	Deaths.				
Natural.	Preternatural.	Boys.	Girls.		Face.	Arm.	Funis.	Feet.	Belly.	Breech.	Placenta.			Embryotomy.	Hæmorrhage.	Sudden.	Peritonitis.	Phthisis.
6120	356	3290	3186	53	40	44	21	180	9	45	17	3	112	2	2	2	4	5

CASE IN WHICH THE DELIVERY

OF A

VERY LARGE LIVING CHILD

WAS EFFECTED BY MEANS OF THE LONG FORCEPS.

BY

CHARLES WALLER, M.D.,

OBSTETRIC PHYSICIAN TO ST. THOMAS'S HOSPITAL.

Read Dec. 7th, 1859.

The following case is presented to the notice of the Fellows of the Obstetrical Society, not from any peculiarity in the labour or in the mode of delivery, but simply on account of the unusual size and weight of the child. I have met with no instance of a similar kind in my own practice, and have found one case only in the recorded experience of others. I cannot refer to the document, but if my recollection is accurate, the weight of the fœtus was about seventeen pounds.

For the history of the case about to be described I am indebted to my friend and pupil, Mr. Richmond, under whose care it occurred. The following are his notes.

"I was sent for at half-past five in the morning, of the 2d of October, to Mrs. D—, æt. 44, in labour with her tenth child. Her pains began at ten o'clock on the previous evening; they were slight, and occurred at irregular intervals. On examination, the os uteri was found to be but little dilated, and the head above the brim of the pelvis.

"1 p.m.—There had been no effective pains; the woman was very irritable, and complained much of want of sleep. Forty minims of Tinct. Opii were administered and perfect quietude enjoined.

5 p.m.—Found the patient had slept for a few minutes

only, and had then been disturbed by a noise in the house. Tinct. Opii was repeated.

"7 p.m.—No sleep again; disturbed by noise. The pains were now more severe, the head entering the brim.

"9 p.m.—Head in the same position; the membranes pushed down and feeling unusually thick and hard. Ruptured the membranes, whereon an immense quantity of liquor amnii was discharged. The pains became exceedingly severe and frequent, but the advancement of the head was for some time almost imperceptible."

I saw this patient about five in the morning; she was in extreme pain, and exceedingly restless and irritable. On examination, the passages were soft, moist, and well dilated; a considerable portion of the head had descended into the cavity of the pelvis, although much remained above the brim. Judging it right to complete the delivery, I easily introduced the long forceps, and got a firm hold. On making traction, the head appeared to be descending, but the instrument was found to be gradually slipping, leaving the head behind it. This occurred twice; on the third application I introduced the blades as high up as possible, and then found a secure hold had been obtained. With some difficulty I drew down the head, and gradually effected the delivery of a male child.

When born, the size of the child attracted our attention so much, that I requested it might be put into the scales without delay. This was done in the course of the day, and its weight was ascertained to be fifteen pounds, fifteen ounces; the child was living and healthy, there was a small scalp-tumour at the junction of the occipital with the parietal bones, which had subsided by the ninth day, when the following were the measurements of the head:

The circumference, beginning at the orbitar process of the frontal bone and carrying the line around the head, 16¼ inches. From the orbitar process of the frontal bone to the occipital protuberance, 9¼ inches. Transversely, over the arch of the cranium, from ear to ear, 9¼ inches.

The woman has suffered no inconvenience, but, on the contrary, has had a very rapid recovery.

ON THE RISK TO LIFE

OF

FIRST AND SUBSEQUENT PREGNANCIES.

BY

ROBERT BARNES, M.D., F.R.C.P.,

PHYSICIAN TO THE ROYAL MATERNITY CHARITY; ASSISTANT OBSTETRIC PHYSICIAN TO THE LONDON HOSPITAL.

Read Dec. 7th, 1859.

I HAVE been recently consulted by the physician to a life assurance company, on a very important question in obstetrics, concerning which I was able to offer very scanty information. What is the risk to life of a *first* pregnancy? It is the practice of assurance companies to charge an extra premium for pregnancy. But if it is true that first pregnancies are more hazardous than subsequent pregnancies, the question may arise whether the usual extra charge is sufficient to cover the greater risk. I am told that a very eminent obstetric physician looks upon the risk as so great, that he advises the absolute rejection of women pregnant for the first time. It is a question clearly of great interest not only in its bearing upon life-assurance, but also pathologically, and it seems to be one that such a Society as this may, through the contributions of its members, satisfactorily solve.

It seems probable that a larger proportion of women in their first pregnancy are led to assure their lives than of those who have entered upon a second or subsequent pregnancy. If, therefore, the extra premium be calculated on the general mortality in pregnancy, a serious fallacy may

arise in practice, by taking at the average rate more than the average proportion of risk. There may, on the other hand, be a great and unnecessary hardship in rejecting such lives.

To settle this question upon an accurate basis, it is necessary to show what is the risk to life of first and successive pregnancies, and not to rest satisfied with the rough estimate of the risk of pregnancy in general.

When in search of comprehensive information upon most obstetric problems, we naturally turn to the records of the Dublin Lying-in Hospital. In Dr. Collins's report I find that out of

16,414 deliveries, 164 women died = 1 in 100.

4,969 primiparæ, 80 women died = 1 in 63.
11,445 pluriparæ, 84 women died = 1 in 136.

and excluding deaths from puerperal fever, which affected primiparæ most,

Of 4696 primiparæ, 50 died, or 1 in 100.
Of the pluriparæ 58 died, or 1 in 200.

Taking this experience, we should conclude that the risk of a first pregnancy is as two to one. But it is obvious that the experience of a lying-in hospital cannot furnish the data for the solution of this question. It is only in home practice, and, if we look upon the question from an insurance point of view, in practice amongst the easier classes, that we can expect to obtain the elements for a safe calculation. The experience of an obstetric physician who is often called in consultation is so overcharged with hazardous cases, that it is not easy to classify it so as to show ordinary risks. But the experience of a large number of gentlemen engaged in family practice might be so classified.

I would suggest the following tabular form, as one suited to embrace the information required:

Table showing the Mortality of Women in first and subsequent pregnancies, with the causes of the mortality.

	No. of women delivered.	No. of deaths.	Causes of each death, with age, and other particulars of fatal cases.
1st pregnancy .			
2d " .			
3d " .			
4th " .			
5th " .			
6th " .			
7th " .			
8th " .			
9th " .			
10th " .			
Exceeding 10th pregnancy .			

If I were to give my own impressions, I should say that the risk of a first pregnancy is certainly greater than that of a second, third, or fourth. Women lying in for the first time have to prove their puerperal capacity. At the first delivery they encounter those difficulties which arise from faulty pelvic conformation, and those perils which arise from constitutional defects. These difficulties and perils, if surmounted, being revealed at the first labour, may in some cases be averted or lessened in the future. There can be no doubt that women pregnant for the first time are more liable to difficult labour and its consequences, such as exhaustion and phlebitis, to convulsions, to complications calling for instrumental aid. Women who have gone through one labour, or two, or perhaps three, without complications, may be regarded as running the least risk from

pregnancy. But after the fifth labour I believe it will be found that the risk begins to rise rapidly, so that in the eighth or subsequent pregnancies the risk will be fully equal to that of a first pregnancy. Pluriparæ, according to my observation, are more especially liable to malposition; to retroversion of the uterus, to hæmorrhage from placenta prævia, from accidental previous separation of the placenta; and also from atony of the uterus. They are more liable to disease of the uterus and attendant disease of the placenta, leading to adhesion and hæmorrhage. And not seldom they enter upon labour with minds depressed and powers impaired by the inroads made upon their constitutions by previous child-bearing and the cares of maternity. But I must refrain from pursuing general impressions, the object of this brief communication being to elicit from others an experience large enough to justify precise conclusions.

ON THE TREATMENT OF MOLES

AND

PREMATURE EXPULSION OF THE FŒTUS.

BY

ANCELL BALL, L.R.C.P. Ed., &c., Spalding.

Read Dec. 7th, 1859.

In severe and protracted cases of uterine hæmorrhage, where the ovum has already escaped, and the secundines retained, partly within the uterus and partly protruding through its os, prolonging the uterine contractions and sufferings of the already exhausted patient, as well as keeping up an alarming hæmorrhage, I have been in the habit of bringing such a state of things to a speedy and successful termination by the introduction of a speculum vaginæ, along which is passed one of the three instruments accompanying these lines, the instruments in question being long, narrow-bladed forceps, like the obstetric forceps in miniature, and capable of being used within the speculum. The tricipital forceps will be found a somewhat safer instrument than the bicipital ones, and all three during extraction require to be accompanied with a twisting of the instrument, in order to strengthen the substance of the perhaps decomposed placenta.

This plan is not recommended with a view of superseding the ordinary treatment of uterine hæmorrhage, but expressly for selected cases, such as I have just described.

The speculum should be large, for the purpose of receiving a portion of the os uteri with its protruding mass, as well as of admitting sufficient space for the free separation of the blades of the forceps, the handles or handle of which should be allowed to fall at the bottom part of the speculum, in order that, when used, the hand may not obstruct a view of the substance to be extracted.

CASE

OF

RETROFLEXION OF THE GRAVID UTERUS

DURING LABOUR AT TERM.

BY

HENRY OLDHAM, M.D., &c.,

OBSTETRIC PHYSICIAN AND LECTURER ON OBSTETRICS AT GUY'S HOSPITAL; EXAMINER IN MIDWIFERY AT THE ROYAL COLLEGE OF SURGEONS.

Read Dec. 7th, 1859.

On June 27th, 1859, I received a note from Mr. Osborne, of Brixton, informing me that he had "a case of midwifery which was likely to prove one of more than usual difficulty; that he supposed it to be retroversion, as the os was very high up behind the symphysis and the posterior part of the neck of the uterus was thinned and distended. Active labour had not commenced, but there had been premonitory pains during the previous day and night." A consultation was arranged for the following day at 2·15 p.m., and in the morning Mr. Osborne wrote to me that "labour had set in the previous evening, but no progress had been made, the os being beyond reach high up behind the symphysis."

On seeing this patient at the appointed time, I learned that she had formerly been lady's-maid to a patient of my own, and that I had seen her three years before when she was suffering from pain in passing water with straining efforts at defecation, which symptoms had followed two falls which she had suffered one year previously. The uterus at this time was in a state of inflammatory congestion, and was

displaced backwards. Suitable remedies were prescribed, including a pad and bandage, and although her symptoms were ameliorated, the pain in passing water and at stool continued, and were aggravated at the menstrual times. She married in May, 1857, and when she was far advanced in pregnancy Mr. Osborne was engaged to attend her; and it was on making an examination when the premonitory pains of labour were on, that he first discovered the peculiarity of the case. Pregnancy had gone on without any notable aggravation of the obstruction to the bladder and rectum, and the former symptoms particularly did not exceed what is often experienced by healthy women. She was a well-formed, healthy-looking person, middle-aged, with a large pelvis. This was her first pregnancy and she had gone her full time. Mr. Ord and Mr. Brown, both gentlemen of great experience, had seen the case with Mr. Osborne, and with Mr. Ord, jun. were now present; and my colleague, Dr. Hicks, had accompanied me.

In investigating the case, I first placed the patient on her back, and noticed that the abdominal tumour differed in size and shape from the fully developed gravid uterus. It formed, it is true, a considerable swelling, hard and well defined, but it did not reach higher than a hand's breadth above the umbilicus, and its summit receded instead of projecting. The front surface was, relatively speaking, narrowed and angular, and the great bulk of the womb at term, as felt in the spread and projection of the abdominal walls, was wanting. Per vaginam, the cavity of the pelvis was filled with a large, even, spherical tumour, which reached the brim of the pelvis in front, closing the walls of the vagina, and expanding behind in the hollow of the sacrum. It was elastic, and obviously contained some fluid, after displacing which the finger could reach and pretty well define a solid body which suggested the presence of the fœtal head. On tracing the vagina this canal was found to run close behind the pubic symphysis, but the uterus was beyond the reach of the finger. All this was in favour of retroflexion; but to

make the diagnosis certain, as well as to see what best could be done for delivery, I resolved to place her deeply under the influence of chloroform, which was accomplished by Mr. Osborne and Mr. Ord, jun., while she lay on her left side in the usual manner.

There were several favorable circumstances which were observed at this time. Notwithstanding labour had been on for eighteen hours, preceded by the weariness of nearly two days of premonitory pain, there was no sign of exhaustion, the pulse was good, the skin moist and cool, the spirits fairly good, the bladder and rectum relieved by their natural action. Further, the tumour, although occupying the pelvic cavity, was not impacted. The labour-pains were not of an expulsatory character, and the tumour remained stationary under their influence, and did not descend; the soft parts were cool and free from inflammatory œdema, which adds both bulk and danger to the complications of pelvic tumours with labour. Mr. Osborne had noticed early in the labour that some meconium had passed away, from which it was inferred that the breech presented and the membranes had ruptured three days before.

Having gradually dilated the orifice of the vagina, which was rigid, I passed the left hand in the course of the vagina, pressing the tumour back, in order to gain a passage to the os uteri. Throughout this process the hand was much cramped, and the space it had to traverse before reaching the os uteri, which was at least three inches above the brim, was considerable; the os was closed, but by introducing the tip of one finger, then another, I gradually dilated it, and it yielded more easily than I could have expected. From this examination two points were made out. First, the fingers at full stretch could just touch the loose scrotum of the child; but with the other hand over the abdomen I found I could catch the hip-bone of the child and draw it down by external manipulation alone, so that the fingers could touch not only the scrotum, but the breech and anus. Secondly, by directing the fingers backward they could be

bent over the margin of reflexion, which comprised a remarkably dense firm tissue, and the cavity of the uterus was perceived to dip downwards. The diagnosis was thus

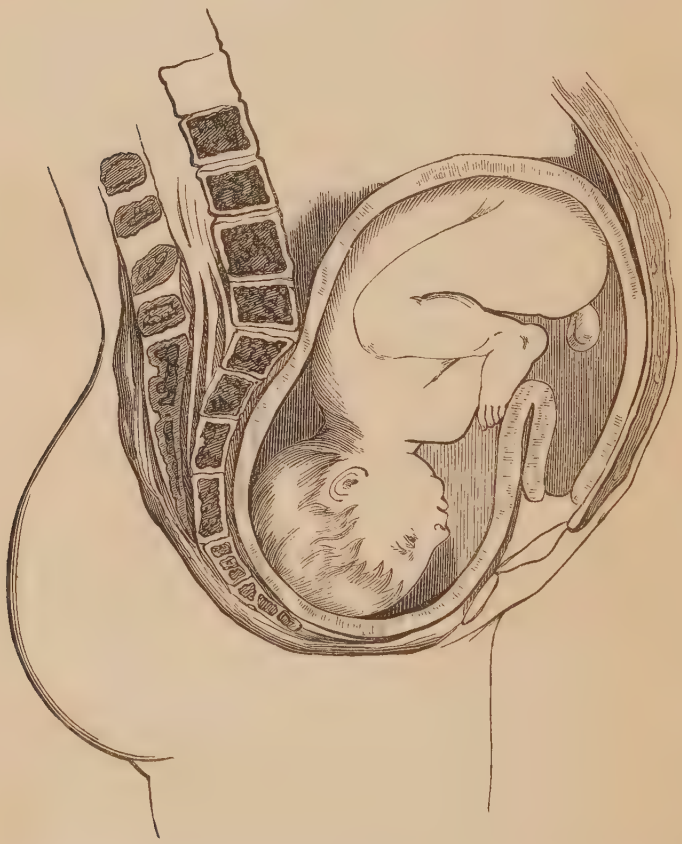


Diagram showing the position of the uterus and of the fœtus, as made out by examination.

confirmed, and it was obvious that we had to do with a

complete retroflexion of the gravid uterus at term, the fundus of which containing the head of the child and a large proportion of liquor amnii, occupied the pelvic cavity; the lower segment raised considerably above the pelvic brim, the vagina being correspondingly lengthened, was partially occupied by the breech, although this part was elevated on account of the depth of the head, and was only slightly bent towards the os uteri by the curve of the uterus. The breech, however, could be made to ride round the bend, and be directed downwards by the hand applied outside. I now made an attempt to raise the uterus, by spreading the hollow of the hand over the convex fundus and pressing it firmly towards the inlet of the pelvis, but the mass was too yielding and large to be moved, and I withdrew my hand.

It now appeared to me that my next resource was to make a more resolute attempt to secure a hold on some portion of the pelvic extremity of the child, and by bringing it down as low as possible, to raise the head from its depending position, and so facilitate the replacement of the uterus. I could not hope for assistance from any known instrument, as the space was too narrow and too deep to admit its being applied. I introduced the *right* hand flattened and cramped between the uterus and pubis, and tried to reach the bend of the child's thigh aiding the endeavour by external pressure, but I could do no more than reach the anus; into this I inserted my finger, and found I could get a bearing on the side of the fœtal pelvis, which allowed me, after persevering for some time, to draw the breech a little lower; and at last I was sensible of a distinct corresponding elevation of the head below. I then suddenly and rapidly shifted my hand from the child's pelvis to the lower part of the tumour, external pressure being well maintained, and I found it yield at once to an effort to raise it; and by following it firmly, the fundus was raised above the brim, and with remarkable rapidity passed to the upper and fore part of the abdomen. The os uteri now lowered, and grasping a foot I withdrew the child in a few minutes, but it had ceased to

breathe. One hour was consumed in the delivery, during which the patient was fully under the influence of chloroform.

Mr. Osborne now took charge of the case, and withdrew the placenta, and from him I learned that for the first three days she was doing well, with a quiet pulse, when a large black clot was expelled, with a quantity of dark treacle-looking fluid, horribly offensive, which was succeeded by hæmorrhage of an alarming character. From this, however, she recovered. I have not had the opportunity, on account of the patient being in the country, of examining the uterus since delivery.

From this case the following inferences may be deduced:

1. That it confirms the opinions of Dr. Merriman as derived from his cases, that pregnancy may go on to term with a complete retroflexion of the womb; and that this displacement may form an important complication of labour.

2. That the symptoms which accompany the gradual growth of the womb in this direction are not necessarily severe or such even as to excite the attention of the patient or practitioner; and by no means so severe in causing obstruction to the pelvic viscera, as are sometimes met with in retroversion about the fourth month.

3. That the displacement may be redressed during labour, and probably in some cases before or at the commencement of labour as the first step in its management; and that it is, better to do this than to leave the case to self-reduction, with the dangers of a prolonged labour, as in Dr. Merriman's cases, which lasted five days.

ON

SLOUGHING OF THE FŒTAL SCALP

AS THE RESULT OF TEDIOUS LABOUR.

BY

WILLIAM O. PRIESTLEY, M.D.,

LECTURER ON MIDWIFERY, ETC.

Read Dec. 7th, 1859.

Obstetric practitioners fully recognise the deleterious influence of long continued pressure on the soft parts of the mother during a protracted labour. Cases are but of too frequent occurrence in which impaction of the child's head, for an inordinate period, in the maternal pelvis, has been followed by pelvic inflammation and sloughing of some portion of the genital passages, and the subsequent formation of vesico-vaginal, or more rarely of recto-vaginal, fistulæ.

A common history of such instances is, that from a contracted pelvis, too large size of the fœtal head, an insufficiency of uterine action, or two or more of these conditions combined, the child's head has remained impacted for many hours in the mother's pelvis; and if the natural powers are at length sufficient to complete the case, or instrumental interference is at last resorted to, the relief comes too late to avert the after consequences. Gangrenous inflammation of the walls of the vagina follows, and in a few days a slough separates, which lays open the bladder or rectum, as the case may be.

Dr. Simpson remarks, that "no soft parts any more than the maternal canals could stand, without endangering their vitality, the steady pressure of a firm body upon them for twenty or thirty hours, such as that which the detained fœtal head exerts in contracted pelves upon the two

points of contraction, the symphysis pubis before, and the promontory of the sacrum behind. It is not a matter of wonder that the soft structures compressed at these special points, between the fœtal head and maternal bones, should sometimes inflame and slough. It is rather surprising that this consequence does not oftener follow."

Dr. Beatty, of Dublin, again lays it down as an axiom that "it is the *continuance* of the pressure that does the mischief rather than its *intensity*." He instances the fact that the malingering soldier, by strapping a coin or other hard substance tightly over some part of his body, can produce an ulcer at will. At first no effect is produced, and if the apparatus is removed in a short time there is no evil consequence; but if the same amount of pressure is continued for some hours, such a degree of injury is inflicted as terminates in the destruction of the part, and a sloughing ulcer is the result.

Much attention has been bestowed on cranial blood-swellings upon the heads of new-born children, but these are generally regarded as the result of *sudden* pressure, however applied; and so far as I am aware the injurious effects of long continued pressure from impaction of the fœtal head in the mother's pelvis have been studied more exclusively as they affect the parent. Yet it is evident that whenever pressure is made to bear thus continuously on the maternal passages, it must act equally on the soft parts covering the fœtal head, the scalp being jammed along with the soft parts of the mother, between the bony pelvis on one side and the cranial bones on the other.

That gangrenous inflammation of the fœtal scalp after tedious labour is not a common occurrence, however, may be inferred from the fact, that no mention of it is made in our standard works on Midwifery, and the explanation of its rarity is probably to be found in the greater tolerance to the effects of pressure possessed by a firm, resistant structure, like the scalp, as compared with the mucous membranes of the mother; and also in the greater vitality generally of fœtal tissues compared with maternal ones.

The following case came under my notice during the time I was Physician-Accoucheur to St. George's and St. James's Dispensary, and after a careful inquiry into all the circumstances, I could arrive at no other conclusion than that the injuries to the head, and the subsequent death of the child, were attributable to the length of time which the fœtal head had been allowed to remain impacted in the outlet of the mother's pelvis, and this notwithstanding that the mother escaped without any more serious effects than a somewhat prolonged convalescence.

A child which had been delivered by one of the midwives on the 5th of January, 1857, was reported three or four days after its birth to be seriously ill. On inquiry, it was found that the mother had suffered greatly during a very prolonged labour, and that she had had severe labour-pains of an expulsive character, with only short intervals of rest for forty-eight hours before delivery was completed. The mother's age was twenty-nine years; it was her first confinement and the midwife's account was, that the outlet of the pelvis was very narrow, and that the head lay touching the perinæum for many hours—how many she could not be quite certain. Upon being remonstrated with for not seeking assistance from one of the medical officers, she said she had the constant expectation that the case would soon be terminated, as she felt the head advance a little every now and then, when a sufficiently forcible pain recurred, and she was unwilling to cause trouble by sending during the night. The child was at last expelled somewhat suddenly, and the mother lay exhausted and almost insensible for some hours.

The child cried incessantly the day after its birth, but the day following it took the breast and seemed appeased. It was remarked on the third day after birth that its legs were bent firmly on its body, and that the back part of its head was apparently much inflamed. A day or two later it refused to take the breast, the scalp assumed a dark colour, and it gradually sank, dying on the 13th of January, or eight days after delivery.

A post-mortem examination was made on the 15th, by Mr. Avent, the house-surgeon, Dr. Seton and myself being present. On examining the head, it was found that a slough about the size of a shilling had separated, leaving an ashy wound in the scalp, which penetrated nearly to the bone, and was situated just above the occipital protuberance in the median line. A patch surrounding this wound, equal to the size of two crown pieces, was quite gangrenous and decomposed, emitting an offensive odour of putrefaction. Beyond the limits of this circle of gangrenous inflammation the scalp was extensively ecchymosed, the extravasation of blood extending laterally almost to each ear; upwards, half the length of the sagittal suture; and downwards as far as the first vertebra. Making an incision through the scalp, the pericranium was found to have lost its adhesion to the occipital bone above the origin of the trapezius muscle. The occipital bone itself, as far downwards as its protuberance, was dark coloured and evidently dead. Its superior angle was jammed tightly in between the parietal bones, and it was overlapped by the latter a quarter of an inch on both sides.

The parietal bones retained a vascular union with the pericranium, but the latter was thickened by lymphy deposit, and as far forward as the coronal suture ill-formed pus and bloody serum were infiltrated into the tissue of the scalp.

The hemispheres of the brain were found highly vascular, but firm, and not otherwise changed from a healthy condition. The left lobe of the cerebellum was slightly softened. Nothing abnormal was discovered in the medulla oblongata or at the base of the brain.

The mother complained of excessive tenderness of the external genitals for many days after her confinement. She had a feverish attack of some intensity, and the lochiæ had an offensive odour. No fistula was formed, however, and she gradually got well. When I called upon her four or five weeks after her delivery, hoping to make an examination of the pelvic outlet, I found she had removed to the country, and was lost sight of.

I had little doubt in my own mind, when this case occurred, as to the cause of the sloughing of the child's scalp, but as it was a somewhat unusual result, and seemed to need the confirmation of additional cases, I kept the notes by me in the expectation of meeting with other instances. No other cases have as yet presented themselves in my own practice, but I have been induced to submit the single case to the Society, by having seen during the last autumn, in the possession of Dr. M'Clintock, the talented Master of the Dublin Lying-in Hospital, two coloured drawings of fœtal heads, in which injuries very similar to those described were present, and which were attributed by Dr. M'Clintock to the effects of long-continued impaction of the child's head in the maternal pelvis before the patients were brought to the hospital.

Such instances are of course open to the suspicion that some injury may have been inflicted by the hand of the midwife in attempts to disengage the head from the pelvis. I feel satisfied in my own mind that in the case I have described no such explanation is tenable. The midwife had been many years attending cases for the dispensary, and knew perfectly well that labour could not be facilitated by any such attempts. The most careful inquiry was instituted as to whether any violence had been used, but without result. The strongest evidence on this point, however, is the fact that the centre of the injury was not over the presenting portion of the head, but over the occipital protuberance, where the head would come in contact with the pelvic ring, and thus be inaccessible to the fingers. In supposing that the fœtal head was making progress whenever a sufficiently forcible pain recurred, the midwife was probably misled by the increased tumefaction and descent of the scalp, which is well known to be a source of fallacy in cases where impaction has occurred, and this was looked upon as palliating her apparent negligence in not reporting the case at an earlier period to one of the medical officers.

The reason why the mother escaped without the formation of a fistula in this instance may have been that as

the delay to delivery occurred when the head was passing through the outlet of the pelvis, the obstruction was probably caused by an approximation of the tuberischia narrowing the lateral diameter of the pelvis; the urethra and bladder would thus be away from the seat of greatest pressure.

REPORT OF A CASE

OF

FIBROUS TUMOUR OF THE UTERUS,

ILLUSTRATING A

SURGICAL OPERATION FOR THE CURE OF THIS AFFECTION.

BY

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SENIOR SURGEON TO THE LONDON HOME FOR SURGICAL DISEASES OF WOMEN.

Read Dec. 7th, 1859.

THE fibrous tumours of the uterus referred to, are not those growing from its neck, or at some short distance within it, attached by a pedicle, and well known under the name of polypi, but fibrous growths developed from, and partially included within, the thickness of the walls of that organ, at any part of its cavity, and of very various size, attended by a greater or less augmentation of its volume.

Such tumours have hitherto been very generally considered almost or quite beyond the reach of surgical art.

Where attempts at treatment have been made, success has very rarely followed.

The enucleation of the tumour is an operation so fraught with immediate danger, as well as with the risk subsequently of pyæmia, that I have long since discarded it. Medicinal treatment, as recommended, by Kreuznac water, by bromide of potassium, or by bichloride of mercury, holds out no sufficient prospect of success, and at best can only delay their rapidity of growth.

On the other hand, nature herself sometimes effects a cure by setting up a process of degeneration within the substance of the tumour, which becomes converted into a calcified mass and remains as a portion of dead matter within the uterus.

It is unnecessary here to dwell upon the distressing character of these tumours, or on the danger to life from the hæmorrhage they give rise to, but I pass on to detail a surgical proceeding which promises to effect a radical cure for these previously irremediable morbid products. The operation to be noticed was performed by me in February last, at which time I was in complete ignorance that the plan had occurred to any other surgeon, but on seeing Dr. Simpson, of Edinburgh, in September last, and mentioning my case to him, that distinguished physician informed me that Dr. Atlee, of Philadelphia, and M. Recamier, of Paris, had both suggested the principle of treatment which I had put into practice—viz., that of breaking up the interior of the tumour.

Moreover, within the last few days my attention has been directed to the last edition of Dr. Fleetwood Churchill's 'Midwifery,' in which it is stated that Dr. Atlee succeeded in curing several cases.

Although, therefore, ignorant until lately that my procedure had been forestalled, I derive this advantage from the circumstance, namely, that its principle has the sanction of many eminent medical men.

The reflection that polypi and these fibrous tumours of the uterus are identical in pathological nature, that the former may be readily destroyed by cutting off by a ligature their source of nutrition through the pedicle, and that the portion posterior to the ligature perishes as well as the anterior or distal mass, gave rise in my mind to the idea that if we could destroy the integrity of a fibrous tumour, and produce a gradual death of its tissue, we might hope for its complete disintegration and removal.

This opinion was further strengthened by an observation made by me some years since in the case of a lady at Shaftesbury, in whom such a tumour gradually broke up and was thrown off as a purulent vaginal discharge. The process went on for a long time—some two or more years—but was eventually completed, and left the patient in the enjoyment of good health, in which she has ever since continued.

A case occurred in February last, in which I resolved to carry out the mode of treatment I had for some time previously conceived.

The following is the record of it, abstracted from the case-book of the 'London Home,' into which institution she was admitted on the 8th of February, 1859. Her age was forty-nine. Her appearance indicated great and protracted suffering. The face sallow, skin wrinkled, and the flesh wasted. She gave the following history of herself:—

She had been ill for six years, the first symptoms being pain and swelling in the lower parts of the abdomen, and a profuse menstrual discharge. The swelling gradually increased, accompanied by augmented pain in the pelvis, a frequent desire to pass water, and a great difficulty in defæcation.

The obstruction to the relief of the bowels at length became so great that she was obliged to resort, as a rule, to purgatives.

She was almost always in pain from the pressure of the tumour on the neighbouring viscera.

She had been under medical treatment a long time, and latterly under the able care of Mr. Teale, of Leeds, who candidly told her that he had no hopes of her being cured.

Examination.—By external pressure on the abdomen, I discovered a tumour extending from the pubis half way up towards the umbilicus, and of the size of a five months' pregnancy.

On a vaginal examination, I found I could only pass the finger about an inch up, as it came into contact with the os uteri, which was slightly patulous and very rigid. The cervix had been entirely obliterated by having been taken up in the enlargement of the body of the uterus. The whole cavity of the pelvis was felt to be occupied with the uterus, which was pressed back into the hollow of the sacrum, and on the other side squeezed the bladder under the arch of the pubis.

She was suffering much from dyspepsia and palpitation of the heart, and was altogether so much out of health that I at first hesitated to try any operative procedure. However, by careful attention to her diet, and the administration of

appropriate medicine, she improved much in health, and earnestly desired to have the operation performed, the general character of which I explained to her. On the 21st of February I accordingly operated in the presence of several surgeons, and with the assistance of my colleagues, in the following manner.

I placed her in the lithotomy position, and after gradually dilating the vagina, I introduced Bozeman's speculum, and brought into view, by means of two vulcellum forceps, the os uteri, which I then divided in three places by a straight-pointed bistoury, and thus brought well into sight the fibrous tumour, which I pierced in the centre, and then cut out from it a portion, much in the manner of coring an apple. Through the cavity thus formed, I broke down as much as possible the surrounding tissue of the tumour, and then concluded the operation by placing oiled lint in the incisions in the neck of the uterus, and by plugging the vagina with the same material.

So soon as the patient (after having been put to bed) had recovered from the effects of chloroform, I gave her two grains of opium, and subsequently, for the next three or four days, kept her slightly under its influence. On the third day the oiled lint was removed, and the vagina afterwards syringed night and morning with water containing a small quantity of chloride of lime. For the first few days there was considerable uneasiness and pain on pressure over the whole uterus, but these symptoms steadily subsided under the influence of opium, and by maintaining perfect quiet.

After fourteen days the nurse reported that she could pass the injection-tube two inches into the vagina instead of one inch only, as at first, and that the discharge was free and not offensive.

In another fourteen days the tube could be introduced still further, and a small quantity of water could be retained in the bowel when injected, whereas, before the operation, not an ounce could be kept up. An examination of the abdomen at the same time rendered it evident that there was a considerable decrease in the size of the tumour.

At the end of four months, during which a progressive improvement was manifest, nothing more than a slightly enlarged uterus could be discovered on the most careful examination. The bowels acted freely, the urine passed without difficulty, and the general health was so much improved that the patient could take daily drives in a carriage, and at the end of July was able to leave London for her home in the country.

In the course of this month (November) she has written to me to say she is quite well, and can walk four or five miles without undue fatigue.

Remarks.—In all probability the tumour was in the instance just recorded gradually disintegrated and mostly carried off in the vaginal discharge, but the opinion may be hazarded whether the decrease was not also due in some measure to the operation of absorption carried on by the uterine veins, and first thrown into action by the serious interference with the processes of nutrition and growth belonging to it.

At the present time I have a lady under observation, in whom I recently performed the same operation as above described, and in whom the decrease of the mass seems to be pre-eminently the result of a sort of gradual solution or disintegration, followed as a consequence by a copious muco-purulent discharge.

Time and further experience can alone determine the utility of this procedure; should its success be proved, the benefits to a very large class of sufferers will indeed be great. To assist the solution of this question, I shall from time to time place before the profession the results of my experience.

A CASE

OF

EXCESSIVE VOMITING IN EARLY PREGNANCY,

DEPENDING ON THE IRRITATION OF THE GRAVID UTERUS.

BY

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PHYSICIAN-ACCOUCHEUR TO ST. MARY'S HOSPITAL.

Read Dec. 7th, 1859.

KATE O'C—, æt. 19, unmarried, of short stature, was admitted into the Victoria Ward on the 18th of July, 1859. She had been ill for about a week before her admission, and suffered from incessant vomiting after taking food. This symptom was referred to cerebral disorder and to hysteria, but it resisted every form of treatment which could be devised, and increased in severity. In the early part of September, after she had been six weeks in the hospital, I was asked to examine her, the possibility of pregnancy having suggested itself. She was at this time in a state of extreme emaciation; the vomiting was constant; the pulse ranged from 120 to 140; there was great tenderness of the epigastrium; delirium occasionally supervened; at other times her state was one of semi-consciousness. She lay helplessly in the supine position, unable to move her body or limbs, from profound debility. I ascertained that the catamenia had last appeared about a fortnight before she came into the hospital. She confessed after much denial, to intercourse on two occasions shortly after this menstruation. The sickness came on suddenly, and had continued without intermission. The uterus was found, on a digital examination, to be enlarged, and the os uteri softened. The areolæ were rose-coloured and the follicles somewhat developed, and

the mammæ were full and rounded, the development of the breasts contrasting in a remarkable manner with the atrophied condition of the body generally. These facts rendered the existence of pregnancy so extremely probable, that she was subsequently placed under my care, and removed to the Boynton Ward.

As all the remedies usually found to moderate vomiting had been tried in vain, I suspended the administration of medicine entirely. A nurse was placed to take special charge of her, and directed to give her one teaspoonful of milk or beef tea, alternately, every half-hour. This made the amount of nourishment given in the twenty-four hours about six ounces. Nothing else whatever was taken by the mouth. The single teaspoonfuls did not cause vomiting, and the whole of this small quantity was retained. No stimulus was given, as it had been found that the smallest quantity of wine or brandy produced most distressing vomiting. In addition to the drachm-doses of milk and beef-tea the abdomen, sides, and thighs, were rubbed freely with equal parts of cod-liver and olive oils night and morning, and she had an injection of strong beef-tea twice in the twenty-four hours. When this regimen was commenced, she weighed fifty-one pounds. Although the sickness now ceased, she continued to grow weaker, as the quantity of nourishment retained and absorbed was not enough to support her, much less to make up for previous loss. The pulse continued high, and the other symptoms of exhaustion remained without abatement. For many days it was impossible to determine whether she was in that state of pause from vomiting produced by exhaustion, which has been sometimes found to precede death in such cases; or whether the stomach was slowly regaining its tone. Bed-sores appeared on the hips and nates; the process of emaciation continued, and on the 16th of September her weight was only *forty-seven and a half pounds, or one and a half pounds less than three stone and a half.* I am not aware that any instance is on record of such a light weight. Before the commencement of her illness, she is represented to have been plump and in good condition.

The quantity of food administered was gradually increased, until she took a tablespoonful every half hour, or twenty-four ounces per diem. The wasting now ceased, the pulse became lower, and the signs of returning strength of body and mind slowly manifested themselves. She became able to take solid food in small quantities, and steadily increased in weight. She was so much altered after a short absence from town, during which she was under the care of Dr. Graily Hewitt, that on my return I should scarcely have known her.

In the early part of the treatment, I anxiously considered the question of inducing abortion. I decided against the operation, because, under the administration of very small quantities of food, the vomiting had ceased, and because her weakness was so extreme that the act of abortion at this time would in all probability have destroyed her. The bowels were obstinately confined throughout. From long retention of the fæces, they appeared, when brought away by the beef-tea injections more like coal-cinders, than the ordinary evacuations.

The signs of pregnancy continued. The uterine tumour could be felt in the latter end of October above the pelvic brim; the mammæ were large and vascular, and milk had appeared in the glands. The placental bruit could after this time be heard, although feebly, and I distinctly heard the fœtal heart on the 29th of November. On the 3d of December, symptoms of abortion suddenly came on, and the ovum was expelled. It was discharged entire. The placenta must have been detached spontaneously from the uterus at the commencement of the process, and the placenta, fœtus, and membranes, came away in an unbroken state. The pregnancy had reached the fifth month, but the ovum was very small for this date. The patient bore the abortion apparently well.

The ovum is exhibited to the Fellows. The photographs accompanying the present paper were taken in the middle of September, after her recovery had commenced. The peculiar haggard and ghastly expression of countenance deli-

neated in the engraving (see Pl. VII) agrees with what has been observe in similar cases. It represents, in fact, the face of a person dying from starvation.

As regards treatment, I would remark, that abortion should always if possible be induced before patients pass into the desperate condition which had been reached in the present case. In some of the worst and most dangerous cases of vomiting from the irritation of the gravid uterus, the peril occurs at such an early period, that pregnancy may not be suspected, and if the suspicion be entertained, it is difficult to diagnose it with certainty. I believe that many fatal cases occur from this cause in hospital and private practice, without their real nature being suspected. There is nothing in the whole range of physiology or pathology more extraordinary than the fact, that the gravid uterus, without itself being the seat of special pain, irritation, or disease, shall excite fatal disorder by reflex irritation in some distant organ. In this way pregnant women may be destroyed by secondary disease of the brain, heart, lungs, kidneys, stomach, or intestines. In fact, there is, in particular cases, no limit to the poisonous influence exerted on the rest of the economy by the gravid uterus. When the vomiting is excessive, and irremediable by the usual remedies, nothing appears to be so efficacious as the administration of very small quantities of food. It is difficult or impossible for the stomach to reject a single teaspoonful of any bland, unirritating liquid, such as milk.

[Note.—The patient went on well for two or three weeks after the miscarriage, when symptoms of rapid phthisis became evident, and she left the hospital early in February, 1860, in an advanced state of consumption.]

ON A CASE

OF

HYSTERIA,

SIMULATING, IN THE MOST PERFECT DEGREE, NATURAL LABOUR.

BY

RICHARD HODGES, M.D., F.R.C.S.E., Rochford, Essex.

Read Dec. 7th, 1859.

An unusual and interesting case came under my notice about two years since, the particulars concerning which I have now ventured to lay before the Society.

I was engaged to attend a married woman in her confinement for the first time, then believed by herself and friends to be about five months advanced in pregnancy. Time went on—the usual preparations were made—the nurse secured, the patient happy in the thought of becoming a mother, and pleased with the sympathy elicited from her neighbours in relation to the approaching event. In four months after the first intimation I received I was requested, at about ten o'clock at night, to visit her, and to do so with as little delay as possible, for she had been ill all the day, and reported to be getting rapidly worse. On arriving, the pains were very severe, and of the kind attending the last stage of labour. I was pleased to hear from the nurse that the pains had been very regular all the day, gradually increasing in frequency and intensity, for the hope of a night's rest was before me. They certainly were most severe and forcing, and succeeded each other so rapidly as to give the impression that the process would soon be completed, and the first casual vaginal examination conveyed to my mind

the same idea, for I detected a *soft*, *fluctuating* tumour, filling the vagina, and which, during pain, distended and protruded it through the os externum, precisely as in natural labour when the membranes protrude. I made no observation to those around me, for the pains were so urgent and forcing that I believed the labour would be over in a minute or two, but their continued severity brought no advancement—no alteration. I then examined carefully into the cause of this apparent delay, and found that the tumour was a vaginal cystocele, or prolapse of the anterior parietes of the vagina, caused by an enormously distended bladder. The finger was with difficulty passed up behind this swelling, where the uterus was discovered with its mouth closed, and of the unimpregnated size. The patient and attendants were then informed that not only were these pains spurious, or false, or hysterical—and to which they could not give credit, from the complete manner in which they simulated the pains of labour—but that the patient herself was not even pregnant, which fact astonished them still more, and amused them for many a day.

A dose of chloric ether and opium gave relief, and in the course of two hours a large quantity of urine passed, and the case terminated, affording an excellent illustration of the extraordinary imitative power of the hysteric mind, and of the awkward position a medical man might have been in had he hastily or inadvertently mentioned that all was going on right, and that the child would soon be expelled.

The patient before marriage was subject to frequent attacks of hysteria, and about one year previous to this event was present at a relative's accouchement, where the pains were severe and the labour protracted.

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FORM FOR THE REGISTRATION OF OBSTETRIC CASES,

Drawn up by the Honorary Secretaries of the Obstetrical Society of London, at the request of the Council of the Society. To facilitate the tabulation of cases it is suggested that one page be ruled for TEN *cases.*

Books of forms, ruled and printed as below, can be obtained from Messrs. Smith and Co., Stationers, 52, Long Acre, W.C.

No.	Name and Address.	Age, Married or Single.	No. of previous Pregnancies.	No. of previous Labours at full term.	Dates at which last Catamenia appeared and ceased.	Date of Impregnation, if known.	Date of Fœtal movements being first felt by Mother.	Labour began.		Delivery took place.		Presentation.	Whether delivered naturally; or by turning, forceps, or craniotomy.	Complications, if any; as hæmorrhage, retained placenta, convulsions, &c.	Sex of Child; and if living or dead.	If dead, any peculiarities about body.	Remarks.
								Month and Day of.	Hour of Day.	Day of Month.	Hour of Day.						
	Mrs. Smith, 15, Welbeck Square, London, W.C.	37 M.	Nine. Last Abortion, 20 Jan. 1856.	Five. The last 27 Oct. '58.	3 April, 7 April, 1859.	—	12 August.	Jan. 14.	10 A.M.	Jan. 15.	4 A.M.	Head: first position.	By natural efforts.	The labour was very lingering, the intervals between the pains being long.	Male: dead.	Body decomposed: had probably been dead a few days.	The umbilical cord was long, and twisted once round the child's neck. Mother made a rapid recovery. No trouble with the breasts.
	Mrs. Wilson, Hampstead, N.W.	21 S.	None.	None.	14 Nov., 20 Nov., 1858.	—	13 March, 1859.	August 25.	4 A.M.	August 27.	2 A.M.	Right shoulder.	By turning, while under the influence of chloroform.	——	Female: living.	——	Dr. ——— was called in, and turned while I gave chloroform. The os uteri dilated very slowly at first, the pains being slight. Both mother and child did well.
	Mrs. Brown, 2, Russell St., W.C.	41 M.	Six.	Five. The last on 21 Oct., 1857.	16 Nov., 19 Nov., 1858.	24 Nov. '58. Husband, a Captain in the Navy, and only at home this night.	11 April, 1859. Became very sick and faint at the time.	August 26.	1 P.M.	August 28.	½-p. 12 A.M.	Twins First child came with head in first position. The second, with left arm.	First child delivered naturally. Turned the second and delivered 90 minutes after birth of first.	There was a sharp attack of hæmorrhage after the birth of the second child. It was stopped by pressure.	Both males, and living.	——	There was apparently only one placenta, which was large. The mother had previously been delivered of twins, in July, 1852.

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